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RESULTS OF HEAT TRANSFER TESTS OF A 0.0175 SCALE SPACE SHUTTLE INTEGRATED VEHICLE MODEL 60-OTS IN THE AEDC-VKF TUNNEL A (IH72)

by

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WIND TUNNEL TEST SPECIFICS:

Test Number:	AEDC SWTA V41A-R2A
NASA Series Number:	IH72
Model Number:	60-OTS
Test Dates:	January 6-14, 1977
Occupancy Hours:	57

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ABSTRACT

A thin-skin thermocouple heat transfer test was conducted in the AEDC-VKF Supersonic Wind Tunnel A, to obtain convective heat-transfer-rate distribution on the Space Shuttle Integrated Vehicle 0.0175 scale model 60-OTS during simulated ascent phase of the flight profile. The Vehicle 5 configurations tested included the Integrated Vehicle, the External Tank alone and the Solid Rocket Booster alone. The last two configurations were tested with and without external protuberances. The model was constructed of 17-4 PH stainless steel with a nominal skin thickness of 0.030 in. at the instrumented areas. All thermocouples were spot welded to the thin-skin inner surface.

Data were recorded at nominal Mach numbers of 3 and 4 with simulated Reynolds numbers of 3.8 and 4.1 x 10^6 per foot, respectively. Angles of attack of -5°, 0°, and 5° were tested at each sideslip angle of -9°, -5°, 0°, 5° and 9°.

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TABLE OF CONTENTS

	Page
ABSTRACT	iii
INDEX OF MODEL FIGURES	2
NOMENCLATURE	3
INTRODUCTION	7
CONFIGURATION INVESTIGATED	8
INSTRUMENTATION	11
TEST FACILITY DESCRIPTION	13
TEST PROCEDURES	14
DATA REDUCTION	16
REMARKS	22
REFERENCES	23
TABLES	
I. TEST CONDITIONS	24
II. RUN NUMBER/DATASET COLLATION SUMMARY	25
III. MODEL DIMENSIONAL DATA	31
IV. EXTERNAL TANK T/C CONSTANT SETS & SWITCH POSITION	41
V. RIGHT SRB T/C CONSTANT SETS & SWITCH POSITION	47
VI. LEFT SRB T/C CONSTANT SETS & SWITCH POSITION	49
MODEL FIGURES	52
APPENDIX	
TABULATED SOURCE DATA	68

INDEX OF MODEL FIGURES

Figure No.	Title	Page
1.	Space Shuttle Vehicle 5 Configuration	52
2.	Sketch of Model 60-OTS Installed in AEDC-VKF Tunnel A	53
3.	External Tank T/C Locations	54
4.	Left Hand SRB T/C Locations	55
5.	Right Hand SRB T/C Locations	56
6.	Wind Tunnel and Model Injection System	
	a. VKF Tunnel A	57
	b. Model Injection System	57
7.	Model Installation Photographs	
	a. Model 60-OTS in Tunnel A - Side View	58
	b. Model 60-OTS in Tunnel A - Rear Quarter View	59
	c. Model 60-OTS - Mounting Details	60
	d. Model 60-S - Transition Strip Details	61
	e. Model 60-OTS - External Tank Protuberance Details	62
	f. Model 60-S - Protuberance Details; Aft Region	63
	g. Model 60-S - Protuberance Details; Skirt	64
	h. Model 60-S - Protuberance Details; Forward Region	65
	i. Model 60-S - Separation Motor Details	66
	j. Model 60-S less Protuberances	67

NOMENCLATURE

PLOT SYMBOL	MNEMONIC	DEFINITION
a_1, a_2, a_3		constants used to calculate R, defined in context
α_p	PREBEND	sting prebend angle, degrees
α_s	SECTOR	tunnel sector angle, degrees
b		model wall thickness, inches
c_p		model wall specific heat, BTU/lbm-^oR
C.R.		center of rotation
$\frac{dTw}{dt}$	DTWDT	derivative of model wall temperature with respect to time, ^oR/sec.
h_i	HI	heat transfer coefficient in an interference flow field, BTU/ft^2-sec-^oR
h_{REF}	HREF	reference heat transfer coefficient, based on 1-foot full scale radius sphere, based on Fay-Riddell theory, BTU/ft^2-sec-^oR $8.17173 \sqrt{P_{o_1}} \quad \mu_o^{.4} \quad \left[1 - P_\infty / P_{o_1}\right]^{.25} x$ $\left[0.2235 + 1.35 \times 10^{-5} (T_o + 560)\right] / \sqrt{R_N}\, T_o^{.15}$
h_u	HU	heat transfer coefficient in an undisturbed flow field, BTU/ft^2-sec^oR
$h(T_o')$	H, H(TO)	heat transfer coefficient, $\dot{q}/[T_o - TW]$, BTU/ft^2-sec-^oR
$h(.95T_o)$	H(.95TO)	heat transfer coefficient, $\dot{q}/[.95T_o - Tw]$, BTU/ft^2-sec-^oR
$h(RT_o)$	H(TAW)	heat transfer coefficient, $\dot{q}/[RT_o - Tw]$, BTU/ft^2-sec-^oR
M_∞	MACH	freestream Mach number
M_e		Mach number at the edge of boundary layer
IH NO		NASA test series number

NOMENCLATURE (Continued)

PLOT SYMBOL	MNEMONIC	DEFINITION
L_o	LO	orbiter reference length, inches
L_S	LS	SRB reference length, inches
L_T	LT	ET reference length, inches
OTS	OTS	mated space shuttle vehicle, orbiter, tank, and SRB
	OT	space shuttle orbiter and external tank configuration
P_o	PO	stagnation pressure, psia
P_{o_1}		stagnation pressure downstream of a normal shock, psia
P_∞	P	freestream static pressure, psia
$\dot{q}$	QDOT	heat transfer rate, BTU/ft^2-sec
q_∞	Q	freestream dynamic pressure, psi
r	R	recovery factor
R		analytical temperature ratio, TAW/T_o
R_N		reference nose radius, scaled from 1-foot full scale, ft.
ROW		thermocouple row number
RE/FT	RN/L	unit Reynolds number, million per foot
SFR	STN NO	theoretical stagnation point Stanton number for a scaled 1-foot full-scale radius sphere from Fay-Riddell theory, $h_{REF} / \left(32.174\ P_\infty\ V_\infty\ (0.2235 + 0.0000135\{T_o + 560\})\right)$
SRB		solid rocket booster
t		time, sec.
T_i		initial time, sec.
T	T	temperature, ^oR.

NOMENCLATURE (Continued)

PLOT SYMBOL	MNEMONIC	DEFINITION
T_e		temperature at edge of boundary layer, ^oR
T_o	TO	tunnel stilling chamber temperature, ^oR
Tw	TW	model wall temperature, ^oR
Tw_i		initial model wall temperature, ^oR
T_∞		freestream static temperature, ^oR
T_{aw}	TAW	adiabatic wall temperature, ^oR
T/C NO.	T/C NO	thermocouple number
V_∞	V	freestream velocity, ft/sec
w		model wall density, lbm/ft^3
X_o	XO	orbiter longitudinal coordinate, inches
X_s	XS	SRB longitudinal coordinate, inches
X_T	XT	ET longitudinal coordinate, inches
X/L( )	X/L( )	longitudinal position as a fraction of reference length; ( ) = 0, S, or T
Y		lateral coordinate, inches
ψ	PSI	model yaw angle, degrees ($\psi = -\beta$)
Z		vertical coordinate, inches
α_m	ALPHA	model angle-of-attack, degrees
β	BETA	model angle-of-sideslip, ($\beta = -\psi$), degrees
γ		ratio of specific heat of air
δ		local model surface angle to freestream flow, degrees
δ_{BF}	BDFLAP	body flap deflection angle, degrees

NOMENCLATURE (Concluded)

PLOT SYMBOL	MNEMONIC	DEFINITION
δ_e	ELEVON	elevon deflection angle, degrees
δ_{SB}	SPDBRK	speed brake deflection angle, degrees
ϵ		combination of model roll angle and θ or ψ, degrees
θ	THETA	external tank angular measurement, degrees
λ		local model deflection angle, degrees
μ	MU	viscosity, lb-sec/ft^2
ρ	RHO	density of air, slug/ft^3
ϕ	PHI	orbiter angular measurement, degrees
ψ		solid rocket booster angular measurement, degrees

SUBSCRIPTS

e	local condition at edge of boundary layer
i	initial condition
O	orbiter
S	SRB
T	ET
∞	freestream condition
o	stagnation condition

INTRODUCTION

An experimental investigation was conducted to obtain aerodynamic heating data on the External Tank (ET) and Solid Rocket Booster (SRB) elements of the space shuttle Vehicle during the ascent phase of the flight trajectory. Interference data were recorded on these elements with the vehicle in the Integrated, Launch Configuration. The elements were then tested alone to obtain interference-free data. Both elements, SRB and ET, were also tested alone without external protuberances to obtain undisturbed control heating data.

The test article was a 0.0175 scale thin-skin thermocouple-instrumented model (model 60-OTS) of the Rockwell International Vehicle 5 Configuration based on Shuttle Configuration Control Drawing VC73-000002F. The model was constructed basically of 17-4 PH stainless steel with nominal skin thickness of 0.030 inches at the instrumentation areas. The test was performed during January, 1977 in the AEDC-VKF Tunnel A, Supersonic Wind Tunnel. Nominal test conditions are given in Table I.

A summary of configurations and model attitudes tested is given in Table II. A Total of 297 valid runs were completed in 57 occupancy hours.

CONFIGURATIONS INVESTIGATED

The Rockwell International model 60-OTS is a 0.0175-scale thin-skin thermocouple model of the Space Shuttle Vehicle 5 configuration, see Figure 1. It is composed of three elements: an Orbiter (O); an External Tank (ET); and two Solid Rocket Boosters (SRB's). These investigations obtained aeroheating data on only the ET and the two SRB's. Interference data were recorded by testing all elements together in the Integrated or Launch Configuration where shock waves and flow from adjoining elements affect the heating rates of the element being measured. Interference-free data were obtained by testing the ET and SRB elements alone in undisturbed air. "Clean," interference-free data were recorded by removing all external protuberances (except boundary layer trip strips) from each model and testing it alone. Figure 1 depicts the Vehicle 5 configuration while Figure 2 sketches its installation in AEDC-VKF Tunnel A. Figures 7a through 7c are several photographs of the model(s) installed in the tunnel.

Trip strips were applied to both SRB's and to the Orbiter to insure a turbulent boundary layer over each model element. The spiked nose of the ET effectively tripped its boundary layer so no artificial trip was necessary. The other trips consisted of 0.020-inch-diameter balls spaced on 0.060-inch centers around a form fitted steel strip. The trips were located at an X/L_O of 0.04 on the Orbiter and an X/L_S of 0.019 on the SRB's. Figure 7d depicts a closeup view of the SRB trip strip installed on the model.

Each element of the vehicle has many protuberances which add to the aerodynamic heating problem. This model detailed all of these as can be seen in Figures 7e through 7i. To obtain undisturbed control heating data for use in data analysis, all protuberances were removed and the models tested alone. Boundary layer trips were left on to insure a turbulent boundary layer. A "clean" SRB model installed in the tunnel is shown in Figure 7j.

Model nomenclature is given below.

O - Orbiter which includes the following components:

B_{62}	fuselage
C_{12}	canopy
M_{16}	OMS pods
W_{116}	Wing
E_{52}	Split elevons
V_8	Vertical tail
R_{18}	rudder
F_{10}	Body flap

T_{38} - External tank (spike nose) VC-78-000002E

T - External tank less ET/SRB forward and aft attach brackets

S_{26} - Solid Rocket Booster VC-77-000002G and VC-77-000003F

S - Solid Rocket Booster less all protuberances except boundary layer trip strip.

Dimensional data for these components are detailed in Table III.

During the Integrated Vehicle testing, the inboard portion of the split elevons on the Orbiter wing were deflected $+10^{o}$, (see figure 7b).

INSTRUMENTATION

TUNNEL INSTRUMENTATION

Tunnel A stilling chamber pressure is measured with a 15, 60, 150, or a 300-psid transducer referenced to a near vacuum. Based on periodic comparisons with secondary standards, the uncertainty (a bandwidth which includes 95 percent of the residuals) of these transducers is estimated to be within ±0.2 percent of reading or ±0.015 psia, whichever is greater. Stilling chamber temperature is measured with a copper-constantan thermocouple with an uncertainty of ±3°F based on repeat calibrations.

MODEL INSTRUMENTATION

The thin-skin model 60-OTS was instrumented with 980 iron-Constantan thermocouples with an estimated uncertainty of ±0.5 percent. Each thermocouple was spot welded to the model inner surface at the locations shown in figures 3 through 5 and tabulated in tables IV through VI. Nominal skin thickness was 0.030 inch. Actual skin thicknesses are documented in reference 1. The angular and longitudinal reference systems for the thermocouples are shown in Figure 1. It is important to note that the top centerline is the zero degree location for both the External Tank and each SRB. This is different from previous tests IH41 and IH47, references 2 and 3. Note also that for the right-hand SRB the angular measurement is counter-clockwise.

INSTRUMENTATION (Concluded)

A Beckman 210 analog-to-digital converter was used in conjunction with a Digital Equipment Corp. PDP-11 Computer and a CDC-160-A Computer to record the model temperature data. Data can be recorded from a maximum of 97 thermocouples during each tunnel injection. To handle the 980 thermocouple measurements for this test required grouping the thermocouples in eleven sets. These are called Constant Sets and the groupings are detailed in Tables IV-VI. Table IV contains the External Tank thermocouples composed of Constant Sets 411, 422, 433, 511, 522 and 533. Table V contains the Right SRB thermocouple groupings which are Constant Sets 611 and 622. Table VI contains the Left SRB thermocouple groupings as Constant Sets 811, 822 and 833. Tunnel limitations allowed a maximum of three Constant Sets to be wired in at any one time with a selector switch used to choose which Constant Set to run.

TEST FACILITY DESCRIPTION

The Arnold Engineering Development Center's Von Karman Facility Tunnel A is a closed-circuit, continuous-flow, variable-density wind tunnel, equipped with a model injection system which allows removal of the model from the test section while the tunnel remains in operation. A schematic view of the tunnel and the model injection system is shown in Figure 6.

Tunnel A has a 40- by 40-inch test section with an automatically driven flexible-plate-type nozzle which provides Mach numbers from 1.5 to 6.0. The tunnel operates at maximum stagnation pressures ranging from 29 psia at Mach = 1.5 to 200 psia at Mach = 6.0. Minimum operating pressures range from about one-tenth to one-twentieth of the maximum at each Mach number. The stagnation temperature can be varied from an average minimum of about 540 to a maximum of 750°R, depending upon Mach number and pressure level. A complete description of the tunnel and air-flow calibration may be found in Reference 5.

TEST PROCEDURES

TEST CONDITIONS

The test was conducted at nominal Mach numbers of 3.0 and 4.0. Tunnel conditions prevailing at these Mach numbers are given in Table I.

Data were obtained at angles of attack of -5, 0, and 5 deg. at sideslip angles of 0, ±5, and ±9 deg. The inboard elevons on the orbiter were deflected down 10 deg. during Integrated Vehicle testing. The test run log which has been collated into datasets for DATAMAN computer processing is presented in Table II.

TEST PROCEDURE

In the VKF continuous flow wind tunnel A, the model is mounted on a sting support mechanism in an installation tank directly underneath the tunnel test section. The tank is separated from the tunnel by a pair of fairing doors and a safety door. When closed, the fairing doors, except for a slot for the pitch sector, cover the opening to the tank, and the safety door seals the tunnel from the tank area, allowing access to the model with the tunnel operating. After the model is prepared for the next data run, the personnel egress and the access door to the installation tank is closed, the tank is vented to the tunnel flow, the safety and fairing doors are opened, the model is injected into the airstream, and the fairing doors closed. After the data are obtained,

the fairing doors are opened and the model is retracted into the tank. The sequence can now be repeated with the tank being vented to atmosphere if necessary to allow access to the model in preparation for the next run.

With the model retracted, a typical run sequence for this test began by cooling the model uniformly to approximately 80°F with high pressure air. Once the cooling cycle was complete, the desired model attitude was established in the tank prior to injection. When the desired tunnel free stream conditions were established, the model was injected into the tunnel. As the injector system began to move, termed lift-off, the initial temperature, TW_i, for each thermocouple on the selected Constant Set was recorded. Prior to the model reaching the airstream the data acquisition sequence was started. The model continued to move upward until reaching centerline, where it then translated forward to clear an area of tank-induced shock impingements. Data acquisition continued until the model reached the full forward position, about 5 seconds later, or approximately 8 seconds after lift off. The model was then retracted directly from the tunnel. During data acquisition thermocouple outputs were scanned approximately 17 times per second. After each injection, the cooling cycle was repeated to return the model to an isothermal state.

DATA REDUCTION

The reduction of thin-skin thermocouple data normally involves only the calorimetric heat balance which in coefficient form is:

$$H(TAW) - wbc_p \frac{dTW/dt}{TAW-TW} \tag{1}$$

For this test a value of 0.95 TO was selected for TAW and equation (1) can be written

$$H(0.95TO) = wbc_p \frac{dTW/dt}{0.95TO-TW} \tag{2}$$

Radiation and conduction losses are neglected in this heat balance, and data reduction simply requires evaluation of dTW/dt from the temperature-time data and determination of model material properties. For the present tests, radiation effects were negligible; however, conduction effects can be significant in several regions of the models. To permit identification of these regions and to improve evaluation of the data, the following procedure was used.

Separation of variables and integration of Equation (2) assuming constant w, b, c_p, and TO yields

$$\frac{H(0.95TO)}{wbc_p} (t - t_i) = \ell n \frac{0.95TO - TW_i}{0.95TO - TW} , \tag{3}$$

Differentiation of Equation (3) with respect to time gives

$$\frac{H(0.95TO)}{wbc_p} = \frac{d}{dt} \ell n \frac{0.95TO - TW_i}{0.95TO - TW} \tag{4}$$

Since the left side of Equation (4) is a constant, plotting $\ell n \frac{0.95TO - TW_i}{0.95TO - TW}$ versus time will give a straight line if conduction is negligible. Thus, deviation from a straight line can be interpreted as conduction effects.

The data were evaluated in this manner, and generally a linear portion of the curve was used for all thermocouples. A linear least-square curve fit of $\ell n [(0.95TO-TW_i)/(0.95TO-TW)]$ versus time was applied to the data. The data reduction time was delayed for all thermocouples that were influenced by the tunnel-induced shock until they had cleared this region. In general, the thermocouples on the external tank with an X/L greater than 0.2 and the thermocouples on each SRB with an X/L greater than 0.113 were reduced starting 2.4 seconds after centerline. The remaining thermocouples on the external tank were reduced starting at centerline. The remaining thermocouples on each SRB were reduced after a delay of 0.6 seconds. The curve fit extended for a time span which was a function of the heating rate, as shown in the following list:

Range	No. of Points (Fit Length)
$\frac{dTW}{dt} > 32$	5
$16 < \frac{dTW}{dt} \leq 32$	7
$8 < \frac{dTW}{dt} \leq 16$	9

Range (contd)	No. of Points (Fit Length)
$4 < \frac{dTW}{dt} \leq 8$	13
$2 < \frac{dTW}{dt} \leq 4$	17
$1 < \frac{dTW}{dt} \leq 2$	25
$\frac{dTW}{dt} \leq 1$	41

The above time spans were adequate to keep the evaluation of the right side of Equation (4) within the linear region. The linearity of the fit was substantiated by visual inspection of the cases in question. This visual check of the data was done on the VKF graphics terminal. Strictly speaking, the value of c_p for the material was not constant, and the following relation;

$$c_p = 0.0797 + (5.556 \times 10^{-5})\ TW, \text{ (17-4 PH stainless steel)} \quad (5)$$

was used with the value of TW taken at the midpoint of the curve fit. The maximum variation of c_p over any curve fit was less than 1.2 percent. The value of density used for 17-4 PH stainless steel was

$$w = 490.0\ lbm/ft^3$$

ADIABATIC WALL TEMPERATURE

The maximum tunnel stagnation temperature available for each Mach number was tested and is listed in Table I. With these relatively low

stagnation temperatures, the difference between the model wall temperature and recovery temperature was generally small in regions of peak heating. This small temperature difference causes the calculation of the heat-transfer coefficient to be very sensitive to deviations from the actual adiabatic wall temperature. Two values of the heat-transfer coefficient have been calculated based on an assumed constant recovery temperature, namely H(TO) and H(0.95TO). To account for changes in the recovery temperature, a third value of the heat-transfer coefficient has been tabulated based on an analytical temperature ratio, R = TAW/TO.

The analytical method for determining R was developed by Rockwell International and has been used to calculate H(RTO). In this method, the following relationships were assumed:

$$R = \frac{TAW}{TO} \tag{6}$$

and

$$TAW = T_e \left(1 + \frac{\gamma - 1}{2} r M_e^2\right) \tag{7}$$

where

$$r = 0.898 \text{ for turbulent flow}$$

with r being the recovery factor and the subscript e identifying local properties at the boundary-layer edge. From these relationships, the temperature ratio can be defined as:

$$R = \frac{1 + 0.2 r M_e^2}{1 + 0.2 M_e^2} \tag{8}$$

which is a function of the recovery factor and the local Mach number. The local Mach number can be written

$$M_e = M_e(M_\infty, \delta) \tag{9}$$

where ∞ identifies the free-stream property and δ is the local surface angle of attack. Standard matrix techniques, Ref. 5, were used to derive the following relationship for δ:

$$\delta = \arcsin (\sin \lambda \cos \alpha_s + \cos \lambda \cos \varepsilon \sin \alpha_s)$$

where α_s = alpha-sector, deg

ε = roll model + $(\theta + 180)$, deg; for external tank

ε = roll model + $(\psi + 180)$, deg; for left SRB

ε = roll model + $(180-\psi)$, deg; for right SRB

λ = local model deflection angle, deg

The edge conditions were computed from M_∞ and δ using the tangent cone flow theory. The following relationship was used to calculate the temperature ratio:

$$R(M_\infty, \delta) = a_1 + a_2 \cdot (\sin \delta)^{a_3} \tag{10}$$

The value of the constants used for this test are:

M_∞	a_1	a_2	a_3
3.0	0.9345	0.1004	2.165
4.0	0.922	0.1004	1.965

The method used to calculate the analytical temperature ratio, R, has been applied to all of the tabulated data. The method represents a

simplified approach to present a more realistic evaluation of TAW. However, in regions of separated flow or complex interaction, the values calculated for R may no longer apply and should be used with extreme care.

PRECISION OF MEASUREMENTS

Test Conditions

Uncertainties of the basic tunnel parameters were estimated from repeat calibrations of the PO and TO instruments and from the repeatability and uniformity of the tunnel flow during calibrations. The parameters, PO, TO, and MACH NO., with their uncertainties, were then used to compute the uncertainties in the other parameters dependent on these by means of the Taylor series method of error propagation.

MACH NO.	Uncertainty, percent			
	MACH NO.	PO	TO	RE/FT
3.0	0.7	0.2	0.5	1.3
4.0	0.5	0.2	0.5	1.3

Data

Estimated uncertainties for the individual terms in Eq. (2) were used in the Taylor series method of error propagation to obtain uncertainty in values of heat-transfer coefficient as given below:

H(TO)	Uncertainty, percent
10^{-4}	12
10^{-3}	11
10^{-2}	9.5

REMARKS

Due to the short time period between this test and a previous test (IH68) at Ames, it was impossible to thoroughly recondition the instrumentation wiring, so signal losses from some thermocouples were anticipated. On the ET, losses of up to 20% were experienced at several switch positions as a result of added external hardware which covered some thin-skin areas and of wires damaged from exposure and handling during previous tests. Due to the heavy density of thermocouples in most areas, these losses were not considered detrimental to the success of the test.

The data obtained in this test were subsequently combined with data from other tests into two special studies; one dealing with the SRB's, and one dealing with the ET. These studies included calculations and displays of interference-to-undisturbed heating ratios, h_i/h_u, calculating both an experimental (test-to-test) heating ratio and a theoretical (test-to-theory) heating ratio. These studies were extremely lengthy and detailed and are documented as Data Management Services Special Requests SPRTZA and SPRTZW for the SRB (reference 6) and SPRTZB and SPRTZG for the ET (reference 7).

As a result of that effort, this report will contain only tabulations of the basic tunnel data.

REFERENCES

1. "Pre-test Information for Testing the 0.0175-Scale Thin-Skin Thermocouple Model 60-OTS in the AEDC VKF "A" Hypersonic Wind Tunnel" (test IH-72), Rockwell International report SD76-SH-0206, dated December 23, 1976.

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6. "SRB Ascent Aeroheating Analysis of IH47, IH68, and IH72," SPRTZA-1 to SPRTZA-9 and SPRTZW, 12 volumes, November 1978.

7. "ET Ascent Aeroheating Analysis of IH41B, IH48, IH68, and IH72," SPRTZB-1 to SPRTZB-9 and SPRTZG, 34 volumes, May 1978.

TABLE I

TEST : IH72 DATE : 2/4/77

TEST CONDITIONS

MACH NUMBER	REYNOLDS NUMBER (per unit length)	TOTAL PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATURE
3.01	3.8×10^6	37	$710^{\circ}R$
4.02	4.1×10^6	73	$750^{\circ}R$

BALANCE UTILIZED: None

	CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF			
SF			
AF			
PM			
RM			
YM			

COMMENTS:

TABLE II

SHEET 1 of 6 JEV

TEST: IH 72 (AEDC V41A-R2A) DATA SET/RUN NUMBER COLLATION SUMMARY DATE: 2/4/77

DATA SET IDENTIFIER	CONFIGURATION	α	β	MACH	E.T. 411	422	433	511	522	533	R. SRB 611	622	L. SRB 811	822	833
RV‡R01	(1) ΦTS w/PROTUB.	-5	-5	3.01							127	128			
R02		-5	0								123	124			
R03		-5	5								125	126			
R04		0	-5								115	116			
*05		0	0		30	31	32	33	34	35	111	112			
R06		0	5								113	114			
R07		5	-5								121	122			
R08		5	0								117	118			
R09		5	5								119	120			

* T = ET data
R = Right SRB data
M = Fwd Separation Motor DATA
α OR β SCHEDULES

— DATA SET SUMMARY —

RV‡T05, 10, 14-15, 17, 19-20, 24, 29, 34-46
RV‡R01-37, 47-69
RV‡L10, 14-15, 17, 19-20, 24, 29, 34-47, 70-72

TABLE II (Continued)

TEST: IH72 (AEDC V41A-R2A) DATA SET/RUN NUMBER COLLATION SUMMARY DATE: 2/4/77

DATA SET IDENTIFIER	CONFIGURATION	α	β	MACH	E.T. 411	E.T. 422	E.T. 433	E.T. 511	E.T. 522	E.T. 533	R. SRB 611	R. SRB 622	L. SRB 811	L. SRB 822	L. SRB 833
RV*10	(1) ΦTS w/PROTUB.	-5	-9	4.02	15	16	17	55		57	104	103	73	74	75
R11		-5	-5								107	108			
R12		-5	0								109	110			
R13		-5	5								105	106			
*14		-5	9		27	28	29	52	53	54	101	102	70	71	72
*15		0	-9		9	10	11	43	44	45	95	96	61	62	63
R16		0	-5								83	84			
*17		0	0		18	19	20	36	37	38	79	80	76	77	78
R18		0	5								81	82			
*19		0	9		21	22	23	39	40	41		94	58	59	60
*20		5	-9		12	13	14	49	50	51	99	100	67	68	69
R21		5	-5								89	90			
R22		5	0								85	86			
R23		5	5								87	88			
*24		5	9		24	25	26	46	47	48	97	98	64	65	66

* T = ET data
L = Left SRB data
R = Right SRB data
M = Fwd. SEPARATION MOTOR DATA
α OR β SCHEDULES

TABLE II (Continued)

SHEET 3 of 6 JEV

TEST: IH72 (AEDC V41A-R2A) DATA SET/RUN NUMBER COLLATION SUMMARY DATE: 2/4/77

DATA SET IDENTIFIER	CONFIGURATION	α	β	MACH	E.T. 411	422	433	511	522	533	R. SRB 611	622	L. SRB 811	822	833
RV#R25	(2) ϕTS clean	-5	-5	3.01							263	264			
R26		-5	0								259	260			
R27		-5	5								261	262			
R28		0	-5								251	252			
*29		0	0		240	241	242	237	238	239	247	248	243	244	245
R30		0	5								249	250			
R31		5	-5								257	258			
R32		5	0								253	254			
R33		5	5								255	256			
*34		-5	-9	4.02	222	223	224	234	235	236	271	272	210	211	212
*35		0	-9		216	217	218	228	229	230	267	268	204	205	206
*36		0	0		213	214	215	225	226	227	265	266	201	202	203
*37		5	-9		219	220	221	231	232	233	269	270	207	208	209

*T = ET data
L = Left SRB data
R = Right SRB data
α OR β SCHEDULES

M = Fwd. SEPARATION MOTOR DATA

TABLE II (Continued)

SHEET 4 of 6 JEV

TEST: IH72 (AEDC V41A-R2A) DATA SET/RUN NUMBER COLLATION SUMMARY DATE: 2/4/77

DATA SET IDENTIFIER	CONFIGURATION	α	β	MACH	E.T. 411	E.T. 422	E.T. 433	E.T. 511	E.T. 522	E.T. 533	R. SRB 611	R. SRB 622	L. SRB 811	L. SRB 822	L. SRB 833
RV~~T~~38	(3) ET w/PROTUB.	0	0	3.01	133	134	135	129	130	131					
T39		0	0	4.02	136	137	138	139	140	141					
T40	(4) ET clean	-5	-9	3.01	303	304	305	312	313	314					
T41		0	-9		300	301	302	309	310	311					
T42		0	0		297	298	299	306	307	308					
T43		-5	-9	4.02	294	295	296	282	283	284					
T44		0	-9		288	289	290	276	277	278					
T45		0	0		285	286	287	273	274	275					
T46		5	-9		291	292	293	279	280	281					
R47	(5) RIGHT SRB	0	0	3.01							144	145			
R48	w/PROTUB.	0	0	4.02							142	143			

T = ET DATA
R = Right SRB DATA
M = Fwd. Separation Motor DATA

α OR β SCHEDULES

TABLE II (Continued)

SHEET 5 of 6 JEV

TEST : IH 72 (AEDC V41A-R2A) DATA SET/RUN NUMBER COLLATION SUMMARY DATE : 2/4/77

DATA SET IDENTIFIER	CONFIGURATION	α	β	MACH	E.T. 411	E.T. 422	E.T. 433	E.T. 511	E.T. 522	E.T. 533	R. SRB 611	R. SRB 622	L. SRB 811	L. SRB 822	L. SRB 833
RV~~E~~R49	(6) RIGHT SRB	-5	-5	3.01							162	163			
50	CLEAN	-5	0								158	159			
51		-5	5								160	161			
52		0	-5								150	151			
53		0	0								146	147			
54		0	5								148	149			
55		5	-5								156	157			
56		5	0								152	153			
57		5	5								154	155			
58		-5	-5	4.02							180	181			
59		-5	0								176	177			
60		-5	5								178	179			
61		0	-5								168	169			
62		0	0								164	165			
63		0	5								166	167			
64		5	-5								174	175			
65		5	0								170	171			
66		5	5								172	173			

R = Right SRB DATA

M = Fwd. SEPARATION MOTOR DATA

α OR β SCHEDULES

TABLE II (Concluded)

SHEET 6 of 6 JEV

TEST: IH 72 (AEDC V41A-R2A) DATA SET/RUN NUMBER COLLATION SUMMARY DATE: 2/4/77

DATA SET IDENTIFIER	CONFIGURATION	α	β	MACH	E.T. 411	E.T. 422	E.T. 433	E.T. 511	E.T. 522	E.T. 533	R. SRB 611	R. SRB 622	L. SRB 811	L. SRB 822	L. SRB 833
RV ~~Z~~R67	(6) RIGHT SRB	-5	-9	4.02							186	187			
R68	CLEAN	0	-9	↓							182	183			
R69	↓	5	-9	↓							184	185			
RV ~~Z~~L70	(7) LEFT SRB	-5	-9	4.02									197	198	199
L71	CLEAN	0	-9	↓									200	192	193
L72	↓	5	-9	↓									194	195	196

R = Right SRB DATA
L = Left SRB DATA
M = Fwd. SEPARATION MOTOR DATA

α OR β SCHEDULES

TABLE III. MODEL DIMENSIONAL DATA

MODEL COMPONENT: BODY - B_{62}

GENERAL DESCRIPTION: Configuration 140C orbiter fuselage, MCR 200-R4. Similar to 140A/B fuselage except aft body revised and improved midbody-wing-boot fairing, X_o = 940 to X_o = 1040.

MODEL SCALE: 0.0175

DRAWING NUMBER VL70-000140C, -000202C, -000205A, VL70-000200B, -000203

DIMENSIONS:	FULL SCALE	MODEL SCALE
Length (IML: Fwd Sta X_o = 238), in.	1290.3	22.58
Length (OML: Fwd Sta X_o = 235), in.	1293.3	22.63
Max Width (At X_o = 1528.3), in.	264.0	4.62
Max Depth (At X_o = 1464), in.	250.0	4.38
Fineness Ratio	4.899	4.899
Area, Ft^2		
Max. Cross-Sectional	340.885	0.104

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: CANOPY - C_{12}

GENERAL DESCRIPTION: Configuration 140C orbiter canopy. Vehicle cabin No. 31 updated to MCR 200-R4. Used with fuselage B_{62}.

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000140C, -000202B, -000204

DIMENSIONS:	FULL SCALE	MODEL SCALE
Length (X_o = 434.643 to 578), in.	143.357	2.508
Max Width (At X_o = 513.127), in.	152.412	2.667
Max Depth (Z_o = 501 to 449.39), in.	51.61	0.903

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: ELEVON - E_{52}

GENERAL DESCRIPTION: Elevon for configuration 140C. Hingeline at X_o = 1387, elevon split line X_w = 312.5, 6.0", beveled edges, and centerbodies.

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000140C, -006089, -006092

DIMENSIONS:	FULL SCALE	MODEL SCALE
Area - Ft^2	210.0	0.064
Span (equivalent), in.	349.2	6.111
Inb'd equivalent chord, in.	118.0	2.065
Outb'd equivalent chord	55.19	0.966
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	0.2096	0.2096
At Outb'd equiv. chord	0.4004	0.4004
Sweep Back Angles, degrees		
Leading Edge	0.0	0.0
Trailing Edge	- 10.056	- 10.056
Hingeline	0.0	0.0
Area Moment (Product of area & $\bar{c}$), Ft^3	1587.25	0.008
Mean Aerodynamic Chord., in.	90.7	1.587
Hingeline dihedral (origin at Z_o = 261.3509), deg.	5.229	5.229

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: BODY FLAP - F_{10}

GENERAL DESCRIPTION: Configuration 140C body flap. Hingeline located at $X_o = 1532$, $Z_o = 287$.

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000140C, -355114

DIMENSIONS:	FULL SCALE	MODEL SCALE
Length ($X_o = 1525.5$ to $X_o = 1613$), in.	87.50	1.531
Max Width (At L.E., $X_o = 1525.5$), in.	256.00	4.480
Max Depth ($X_o = 1532$), in.	19.798	0.346
Fineness Ratio		
Area - Ft^2		
Max. Cross-Sectional (At H.L.)	35.196	0.011
Planform	135.00	0.041
Wetted		
Base ($X_o = 1613$)	4.89	0.0015

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: OMS POD - M_{16}

GENERAL DESCRIPTION: Configuration 140C orbiter OMS pod - short pod.

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-008401, -008410

DIMENSIONS:	FULL SCALE	MODEL SCALE
Length (OMS Fwd Sta X_o = 1310.5), in.	258.50	4.524
Max Width (At X_o = 1511), in.	136.8	2.394
Max Depth (At X_o = 1511), in.	74.70	1.307
Fineness Ratio	2.484	2.484
Area - Ft^2		
Max. Cross-Sectional	58.864	0.018

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: **RUDDER - R_{18}**

GENERAL DESCRIPTION: **The rudder is a secondary movable airfoil at the** trailing edge of the vertical fin that imparts yaw forces. This dimensional data was calculated from the **CML master dimensions.**

MODEL SCALE: 0.0175

DRAWING NUMBER: **Vehicle 5 Configuration MCR 200, Rev. 7**

DIMENSIONS:	FULL SCALE	MODEL SCALE
Area, Ft^2	97.84	0.030
Span (equivalent), In.	198.614	3.476
Inb'd equivalent chord, In.	91.07	1.594
Outb'd equivalent chord, In.	50.80	0.889
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	0.400	0.400
At Outb'd equiv. chord	0.400	0.400
Sweep Back Angles, degrees		
Leading Edge	34.833	34.833
Trailing Edge	26.249	26.249
Hingeline	34.833	34.833
Area Moment (Product of Area & $\bar{c}$), Ft^3	593.889	0.003
Mean Aerodynamic Chord, In.	72.840	1.275

TABLE III. (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT : EXTERNAL TANK - T_{38}

GENERAL DESCRIPTION : Spike nose configuration

MODEL SCALE: 0.0175

DRAWING NUMBER : VC78-000002E (ET DRAWING)
VC72-000002F (SHUTTLE CONFIG. DRAWING)

(Dimensions are to tank structural OML, TPS not included).

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length	1850.525	32.384
Max Width	331.00	5.792
Max Depth		
Fineness Ratio	5.687	5.687
Area - Ft^2		
Max. Cross-Sectional	594.678	0.1821
Planform		
Wetted		
Base		

DMS 011

TABLE III. (Continued)
MODEL DIMENSIONAL DATA

MODEL COMPONENT : BOOSTER SOLID ROCKET MOTOR - S_{26}

GENERAL DESCRIPTION : The BSRM is an external propulsion system which is jettisoned and recoverable after burnout. The BSRM's can be refurbished and reused after recovery.

MODEL SCALE: 0.0175

DRAWING NUMBER : SRB DRAWING - VC77-000002G, VC77-000003F
SHUTTLE CONFIG. - VC70-000002F

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length	1789.60	31.318
Max Width	146.00	2.555
Max Depth	208.20	3.643
Fineness Ratio	8.596	8.596
Area		
Max. Cross-Sectional		
Planform		
Wetted		
Base		
W.P. of BSRM centerline	400.0	
F.S. of BSRM nose	743.0	
B.P. of BSRM centerline	250.5	

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: VERTICAL - V_8

GENERAL DESCRIPTION: Configuration 140C orbiter vertical tail (identical to configuration 140A/B vertical tail).

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000140C, -000146B

DIMENSIONS: TOTAL DATA	FULL SCALE	MODEL SCALE
Area (Theo) - Ft^2 Planform	413.253	0.127
Span (Theo) - In.	315.72	5.350
Aspect Ratio	1.675	1.675
Rate of Taper	0.507	0.507
Taper Ratio	0.404	0.404
Sweep Back Angles, Degrees		
Leading Edge	45.000	45.000
Trailing Edge	26.25	26.25
0.25 Element Line	41.13	41.13
Chords:		
Root (Theo) WP	268.50	4.699
Tip (Theo) WP	108.47	1.898
MAC	199.81	3.497
Fus. Sta. of .25 MAC	1463.35	25.609
W.P. of .25 MAC	635.52	11.122
B.L. of .25 MAC	0.0	0.0
Airfoil Section		
Leading Wedge Angle, deg.	10.00	10.00
Trailing Wedge Angle, deg.	14.92	14.92
Leading Edge Radius	2.00	2.00
Void Area	13.17	0.0040
Blanketed Area	0.0	0.0

TABLE III. MODEL DIMENSIONAL DATA (Concluded)

MODEL COMPONENT: WING - W_{116}

GENERAL DESCRIPTION: Configuration 5 **NOTE:** Identical to W_{114} except airfoil thickness. Dihedral angle is along trailing edge of wing. Geometric twist = 0.

MODEL SCALE: 0.0175 DRAWING NO.: VL70-000140A, -000200

DIMENSIONS:	FULL SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo.), ft^2		
Planform	2690.0	0.824
Span (Theo.), in.	936.68	16.392
Aspect Ratio	2.265	2.265
Rate of Taper	1.177	1.177
Taper Ratio	0.200	0.200
Dihedral Angle, degrees	3.500	3.500
Incidence Angle, degrees	0.500	0.500
Aerodynamic Twist, degrees		
Sweep Back Angles, degrees		
Leading Edge	45.000	45.000
Trailing Edge	- 10.056	- 10.056
0.25 Element Line	35.209	35.209
Chords:		
Root (Theo.) B.P.0.0.	689.24	12.062
Tip, (Theo.) B.P.	137.85	2.412
MAC	474.81	8.309
Fus. Sta. of .25 MAC	1136.83	19.895
W.P. of .25 MAC	290.58	5.085
B.L. of .25 MAC	182.13	3.187
EXPOSED DATA		
Area (Theo.), ft^2	1751.50	0.536
Span, (Theo.), in. BP108	720.68	12.612
Aspect Ratio	2.059	2.059
Taper Ratio	0.245	0.245
Chords		
Root BP108	562.09	9.837
Tip 1.00 b/2	137.85	2.412
MAC	392.83	6.875
Fus. Sta. of .25 MAC	1185.98	20.755
W.P. of .25 MAC	294.30	5.150
B.L. of .25 MAC	251.77	4.406
Airfoil Section (Rockwell Mod NASA) XXXX-64		
Root b/2 =	0.113	0.113
Tip b/2 =	0.120	0.120
Data for (1) of (2) Sides		
Leading Edge Cuff		
Planform Area, ft^2	113.18	0.035
Leading Edge Intersects Fus M.L. @ Sta	500.00	8.750
Leading Edge Intersects Wing @ Sta	1024.00	17.920

TABLE IV

CONSTANT SET 411 IH-72

EXTERNAL TANK

SWITCH POSITION 1

Ch. No.	T/C	X/L	θ
1	600	.04	0
2	601	.05	
3	602	.06	
4	603	.07	
5	604	.08	
6	605	.10	
7	606	.15	
8	607	.20	
9	608	.21	
10	609	.22	
11	610	.30	
12	611	.35	
13	612	.36	
14	613	.37	
15	614	.375	
16	630	.46	
17	631	.47	
18	632	.48	
19	633	.49	
20	634	.50	
21	635	.55	
22	636	.60	
23	637	.65	
24	638	.70	
25	639	.75	
26	640	.80	
27	641	.85	
28	642	.86	
29	643	.87	
30	644	.88	
31	691	.50	17
32	692	.60	
33	693	.70	
34	694	.80	17
35	695	.87	
36	696	.926	
37	NN		
38	NN		
39	699	.05	29.8
40	700	.07	
41	701	.10	
42	702	.15	
43	703	.20	
44	704	.30	
45	705	.35	
46	721	.35	37.7
47	722	.375	
48	723	.50	
49	724	.60	
50	725	.70	
51	726	.80	
52	727	.87	
53	728	.926	
54	NN		
55	NN		
56	2181	.01	180
57	2182	.015	
58	2183	.02	
59	2184	.025	
60	2185	.03	
61	737	.04	
62	738	.045	
63	739	.06	
64	740	.07	
65	741	.08	
66	742	.125	180
67	743	.10	
68	744	.15	
69	745	.175	
70	746	.20	
71	747	.215	
72	748	.23	
73	749	.24	
74	750	.25	
75	751	.30	
76	752	.35	
77	753	.40	
78	754	.50	
79	755	.60	
80	756	.70	
81	757	.80	
82	758	.90	
83	759	.22	235
84	760	.25	
85	761	.27	
86	762	.30	
87	763	.32	
88	764	.34	
89	765	.36	
90	766	.38	
91	782	.36	247
92	783	.365	
93	784	.37	
94	785	.375	
95	786	.38	
96	787	.39	
97	788	.40	

TABLE IV (Continued)

CONSTANT SET 422

IH-72

EXTERNAL TANK

SWITCH POSITION 2

Ch. No.	T/C	X/L	θ
1	789	.50	247
2	790	.60	
3	791	.70	
4	792	.80	
5	793	.90	
6	794	.27	258
7	795	.29	
8	796	.30	
9	812	.40	
10	813	.23	270
11	814	.24	
12	815	.25	
13	816	.27	
14	817	.29	
15	818	.30	
16	819	.31	
17	820	.32	
18	821	.325	
19	822	.33	
20	823	.335	
21	824	.34	
22	825	.345	
23	826	.35	
24	828	.36	
25	829	.365	
26	830	.37	
27	831	.375	
28	832	.38	
29	833	.39	
30	834	.40	
31	835	.50	
32	836	.60	
33	837	.70	
34	838	.80	270
35	839	.90	
36	840	.23	292.5
37	841	.25	
38	842	.27	
39	843	.30	
40	844	.33	
41	845	.35	
42	846	.37	
43	847	.40	
44	848	.45	
45	849	.50	
46	850	.55	
47	851	.60	
48	852	.65	
49	853	.70	
50	854	.75	
51	855	.80	
52	856	.90	
53	857	.84	305.4
54	873	.07	315
55	874	.08	
56	875	.10	
57	876	.15	
58	877	.20	
59	878	.35	
60	879	.40	
61	880	.50	
62	881	.55	
63	882	.60	
64	883	.65	
65	884	.70	
66	885	.75	315
67	886	.80	
68	887	.84	
69	933	.926	337.5
70	934	.415	343.1
71	935	.42	
72	936	.425	
73	937	.43	
74	938	.44	
75	939	.445	
76	940	.45	
77	941	.50	
78	942	.60	
79	943	.70	
80	944	.80	
81	945	.35	348
82	946	.36	
83	947	.37	
84	2187	.025	0
85	2188	.03	0
86	985	.04	270
87	986	.05	
88	987	.06	
89	988	.07	
90	989	.08	
91	990	.10	
92	991	.15	
93	992	.20	
94	993	.01	39
95	994	.025	
96	995	.030	
97	OPEN		

TABLE IV (Continued)

CONSTANT SET 433

IH-72

EXTERNAL TANK

SWITCH POSITION 3

Ch. No.	T/C	X/L	θ
1	OPEN		
2	615	.38	0
3	616	.385	
4	617	.39	
5	618	.395	
6	619	.40	
7	620	.405	
8	621	.41	
9	622	.415	
10	623	.42	
11	624	.425	
12	625	.43	
13	626	.44	
14	627	.445	
15	628	.45	
16	629	.455	
17	645	.89	
18	646	.90	
19	648	.926	
20	649	.95	
21	650	.35	11.25
22	651	.36	
23	652	.37	
24	653	.375	
25	654	.38	
26	655	.385	
27	656	.39	
28	657	.395	
29	658	.40	
30	659	.405	
31	660	.41	
32	661	.415	
33	662	.42	
34	663	.425	11.25
35	664	.43	
36	665	.44	
37	666	.45	
38	667	.455	
39	668	.46	
40	669	.47	
41	670	.48	
42	671	.49	
43	672	.50	
44	673	.60	
45	674	.70	
46	675	.80	
47	676	.85	
48	677	.86	
49	678	.87	
50	679	.88	
51	680	.89	
52	681	.90	
53	682	.91	
54	683	.926	
55	684	.95	
56	685	.33	17
57	686	.34	
58	687	.35	
59	688	.36	
60	689	.37	
61	690	.375	
62	706	.375	29.8
63	707	.50	
64	708	.60	
65	709	.70	
66	710	.80	29.8
67	711	.87	
68	712	.926	
69	NN		
70	NN		
71	715	.05	37.7
72	716	.07	
73	717	.10	
74	718	.15	
75	719	.20	
76	720	.30	
77	767	.40	235
78	768	.23	247
79	769	.25	
80	770	.27	
81	771	.29	
82	772	.30	
83	773	.31	
84	774	.32	
85	775	.325	
86	776	.33	
87	777	.335	
88	778	.34	
89	779	.345	
90	780	.35	
91	781	.355	

TABLE IV (Continued)

CONSTANT SET 511

IH-72

EXTERNAL TANK

SWITCH POSITION 1

Ch. No.	T/C	X/L	θ
1	797	.31	258
2	798	.32	
3	799	.325	
4	800	.33	
5	801	.335	
6	802	.34	
7	803	.345	
8	804	.35	
9	805	.355	
10	806	.36	
11	807	.365	
12	808	.37	
13	809	.375	
14	810	.38	
15	811	.39	
16	858	.85	305.4
17	859	.86	
18	860	.87	
19	861	.88	
20	862	.89	
21	863	.90	
22	864	.91	
23	865	.926	
24	866	.80	309.3
25	867	.81	
26	868	.82	
27	869	.83	
28	870	.04	315
29	871	.05	
30	872	.06	
31	888	.85	
32	889	.86	
33	890	.87	

Ch. No.	T/C	X/L	θ
34	891	.88	315
35	892	.89	
36	893	.90	
37	894	.91	
38	895	.926	
39	896	.95	
40	897	.42	322.3
41	898	.435	
42	899	.45	
43	900	.50	
44	901	.60	
45	902	.70	
46	903	.80	
47	904	.87	
48	905	.42	330.2
49	906	.435	
50	907	.45	
51	908	.50	
52	909	.60	
53	910	.70	
54	911	.80	
55	912	.87	
56	913	.935	335
57	914	.945	
58	915	.04	337.5
59	916	.05	
60	917	.06	
61	918	.07	
62	919	.08	
63	920	.10	
64	921	.15	
65	922	.20	

Ch. No.	T/C	X/L	θ
66	923	.42	337.5
67	924	.435	
68	925	.45	
69	926	.85	
70	927	.86	
71	928	.87	
72	929	.88	
73	930	.89	
74	931	.90	
75	932	.91	
76	948	.375	348
77	949	.38	
78	950	.385	
79	951	.39	
80	952	.395	
81	953	.40	
82	954	.405	
83	955	.41	
84	956	.415	
85	957	.42	
86	958	.425	
87	959	.43	
88	960	.44	
89	961	.445	
90	962	.45	
91	963	.455	
92	964	.46	
93	965	.47	
94	966	.48	
95	967	.49	
96	968	.85	
97	969	.86	

TABLE IV (Continued)

CONSTANT SET 522

IH-72

EXTERNAL TANK

SWITCH POSITION 2

Ch No.	T/C	X/L	θ
1	970	.87	348
2	971	.88	
3	972	.89	
4	973	.90	
5	974	.91	
6	975	.926	
7	976	.95	
8	2186	.02	0
9	OPEN		
10	OPEN		
11	2000	.435	23.07
12	2001	.569	
13	2002	.703	
14	2003	.836	
15	2004	.899	
16	2166	.441	31.48
17	2005	.476	
18	2006	.511	
19	2007	.546	
20	2008	.581	
21	2009	.616	
22	2010	.651	
23	OPEN		
24	OPEN		
25	OPEN		
26	2014	.686	31.48
27	2015	.721	
28	2016	.756	
29	2017	.790	
30	2018	.825	
31	2019	.860	
32	2020	.895	
33	2021	.441	326.8
34	2022	.476	326.8
35	2023	.511	
36	2024	.547	
37	2025	.582	
38	2026	.617	
39	2027	.652	
40	2028	.687	
41	2029	.723	
42	2030	.758	
43	2031	.793	
44	2032	.828	
45	2033	.864	
46	2034	.899	
47	2035	.934	
48	2036	.250	45
49	2037	.30	
50	2038	.325	
51	2039	.350	
52	2040	.375	
53	2041	.40	
54	2042	.42	
55	2043	.425	
56	2044	.43	
57	2045	.435	
58	2046	.44	
59	2047	.45	
60	2048	.47	
61	2049	.55	
62	2050	.60	
63	2051	.65	
64	2052	.75	
65	2053	.80	
66	2054	.83	45
67	2055	.84	
68	2056	.85	
69	2057	.86	
70	2058	.87	
71	2059	.88	
72	2060	.89	
73	2061	.90	
74	2062	.91	
75	2063	.926	
76	2064	.935	
77	2065	.945	
78	2066	.25	36.32
79	2067	.30	
80	2068	.325	
81	2069	.35	
82	2070	.375	
83	2071	.40	
84	2072	.42	
85	2073	.425	
86	2074	.43	
87	2075	.435	
88	2076	.45	
89	2077	.60	
90	2078	.65	
91	2079	.25	33.75
92	2080	.30	
93	2081	.375	
94	2083	.40	
95	2082	.43	
96	2084	.45	
97	2085	.60	

TABLE IV. (Concluded)

CONSTANT SET 533

IH-72

EXTERNAL TANK

SWITCH POSITION 3

Ch. No.	T/C	X/L	θ
1	2086	.65	38.75
2	2087	.937	250.6
3	2088	.937	289.4
4	2089	.937	352.2
5	2090	.355	29.8
6	2091	.36	
7	2092	.365	
8	2093	.37	
9	2094	.355	23.1
10	2095	.36	
11	2096	.365	
12	2097	.37	
13	2098	.355	20.98
14	2099	.36	
15	2100	.365	
16	2101	.37	
17	2102	.355	17
18	OPEN		
19	2104	.40	330.2
20	2105	.405	
21	2106	.41	
22	2107	.40	326.8
23	2108	.405	
24	2109	.405	324.5
25	2110	.41	
26	2111	.41	315
27	2112	.835	309.3
28	2113	.82	305.4
29	2114	.83	
30	2115	.835	
31	2116	.820	301.5
32	2117	.83	
33	2118	.835	

Ch. No.	T/C	X/L	θ
34	2119	.84	301.5
35	2120	.85	
36	2121	.86	
37	2122	.87	
38	2123	.88	
39	2124	.89	
40	2125	.90	
41	OPEN		
42	2127	.925	
43	2128	.935	
44	2129	.82	292
45	2130	.83	
46	2131	.84	
47	2132	.85	
48	2133	.86	
49	2134	.87	
50	2135	.88	
51	2136	.89	
52	2137	.91	
53	2138	.926	
54	2139	.93	
55	2140	.926	289.4
56	2141		270
57	2142		258
58	2143		250.6
59	2144		247.5
60	2145	.930	289.4
61	2146		270
62	2147		258
63	2148		250.6
64	2149		247.5
65	2150	.935	270

Ch. No.	T/C	X/L	θ
66	2151	.935	258
67	2152	.926	33.75
68	2153		31.75
69	2154		23.1
70	OPEN		
71	OPEN		
72	OPEN		
73	OPEN		
74	2158		355.2
75	2160		345.2
76	2161		335
77	2162		330.2
78	2163		326.9
79	2164		324.5
80	OPEN		
81	2166	.441	31.4
82	2167	.425	337.5
83	2168		345.6
84	2169		354
85	2170		5.6
86	2171		17
87	2172	.43	337.5
88	2173		345.5
89	2174		354
90	2175		5.6
91	2176		17
92	2177	.435	354
93	2178	.435	5.6
94	2179	.44	354
95	2180	.44	5.6

TABLE V

CONSTANT SET 611 IH-72

RIGHT SRB

SWITCH POSITION 1

Ch. No.	T/C	X/L	ψ
1	1300	.025	180
2	1302	.075	180
3	1305	.025	270
4	1307	.075	270
5	1311	.025	0
6	1313	.075	5
7	1314	.110	5
8	1316	.075	20
9	OPEN		
10	1318	.10	20
11	1319	.11	20
12	1321	.075	35
13	1322	.11	35
14	1323	.11	65
15	1324	.10	76
16	1326	.025	90
17	1328	.060	↓
18	1329	.075	
19	1330	.10	104
20	1332	.025	135
21	1334	.075	↓
22	1335	.10	
23	1336	.136	263
24	1344	.939	263
25	1345	.115	270
26	1346	.136	277
27	1347	.30	↓
28	1348	.75	
29	1349	.815	
30	1350	.837	
31	1351	.884	
32	1352	.894	
33	1354	.939	

Ch. No.	T/C	X/L	ψ
34	1355	.74	337.5
35	1356	.75	↓
36	1362	.765	0
37	1363	.815	↓
38	1364	.837	
39	1365	.884	
40	1366	.907	
41	1368	.74	22.5
42	1369	.75	↓
43	1372	.925	
44	1373	.932	
45	1374	.939	
46	1375	.74	45
47	1376	.75	↓
48	1383	.74	67.5
49	1384	.75	↓
50	1386	.141	76
51	1387	.148	↓
52	1388	.155	
53	1389	.162	
54	1390	.25	
55	1393	.74	90
56	1394	.765	↓
57	1395	.771	
58	1396	.815	
59	1397	.837	
60	1398	.884	
61	1399	.894	
62	1400	.907	
63	1401	.917	
64	1402	.932	
65	1403	.939	↓

Ch. No.	T/C	X/L	ψ
66	1404	.12	104
67	1405	.127	↓
68	1406	.134	
69	1407	.141	
70	1408	.148	
71	1409	.155	
72	1410	.162	
73	1411	.173	
74	1412	.18	
75	1413	.186	
76	1414	.193	
77	1415	.20	
78	1416	.25	↓
79	1417	.74	112.5
80	1418	.75	↓
81	1420	.925	
82	1421	.932	
83	1422	.939	↓
84	1423	.40	135
85	1425	.98	225
86	1426	.994	↓
87	1430	.953	4.25
88	1431	↓	15.6
89	1432		20
90	1433		24.4
91	1434		35.6
92	1435		40
93	1436	↓	77.5
94	1437	.967	↓
95	1438	.980	
96	1439	.994	↓
97	1440	.953	112.5

TABLE V. (Concluded)

CONSTANT SET 622

IH-72

RIGHT SRB

SWITCH POSITION 2

Ch. No.	T/C	X/L	ψ
1	1441	.967	112.5
2	1442	.98	↓
3	1443	.994	↓
4	1444	Fwd Sep. Motors	↓
5	1445		↓
6	1446		↓
7	1447		↓
8	1448		↓
9	1449		↓
10	1450		↓
11	1451		↓
12	1452		↓
13	1453		↓
14	1454		↓
15	1455		↓
16	1456		↓
17	1457		↓
18	1458		↓
19	1459		↓
20	1460		↓
21	1461		↓
22	1462		↓
23	1463	.2	277
24	1464	.4	↓
25	1465	.5	↓
26	1466	.6	↓
27	1467	.7	↓
28	1468	.9	↓
29	1469	.921	↓
30	1470	.928	↓
31	1471	.937	↓
32	1477	.928	263
33	1479		90

Ch. No.	T/C	X/L	ψ
34	1480		90
35	1481		↓
36	1482		↓
37	1483		↓
38	1484		95
39	1485		↓
40	1486		↓
41	1487		↓
42	1488		↓
43	1489		112.5
44	1490		↓
45	1491		↓
46	1492		↓
47	1493		↓
48	1494		140
49	1495		↓
50	1496		↓
51	1497		↓
52	1498		↓
53	1499		150
54	1298	.008	180
55	1299	.015	↓
56	1301	.05	↓
57	1303	.10	↓
58	1304	.008	270
59	1306	.05	↓
60	1308	.10	↓
61	1309	.11	335
62	1310	.008	0
63	1325	.015	90
64	1327	.04	↓
65	1331	.008	135

Ch. No.	T/C	X/L	ψ
66	1333	.05	135
67	1337	.30	263
68	1338	.75	↓
69	1339	.815	↓
70	1340	.837	↓
71	1341	.884	↓
72	1342	.894	↓
73	1343	.907	↓
74	1353	.907	277
75	1357	.765	337.5
76	1358	.771	↓
77	1359	.925	↓
78	1360	.932	↓
79	1361	.939	↓
80	1367	.724	22.5
81	1370	.765	↓
82	1371	.771	↓
83	1377	.765	45
84	1378	.771	↓
85	1379	.815	↓
86	1380	.837	↓
87	1381	.884	↓
88	1382	.907	↓
89	1385	.771	67.5
90	1391	.55	90
91	1392	.65	↓
92	1419	.771	112.5
93	1424	.925	135
94	1472	.2	263
95	1473	.4	↓
96	1474	.5	↓
97	1475	.6	↓

TABLE VI

CONSTANT SET 811

IH-72

LEFT SRB

SWITCH POSITION 1

Ch. No.	T/C	X/L	ψ
1	1000	.115	0
2	1001	.20	
3	1002	.225	
4	1003	.25	
5	1004	.30	
6	1005	.40	
7	1006	.50	
8	1007	.55	
9	1008	.60	
10	1009	.65	
11	1010	.70	
12	1011	.75	
13	1012	.80	
14	1013	.875	
15	1014	.925	
16	1015	.939	
17	1016	.953	355
18	1017	.967	
19	1018	.980	
20	1019	.994	
21	1020	.115	45
22	1021	.143	
23	1022	.171	
24	1023	.20	
25	1024	.30	
26	1025	.40	
27	1026	.50	
28	1027	.55	
29	1028	.60	
30	1029	.65	
31	1030	.70	
32	1031	.80	
33	1032	.875	
34	1033	.925	45
35	1034	.953	50
36	1035	.967	
37	1036	.980	
38	1037	.994	
39	1038	.0	90
40	1039	.002	
41	1040	.008	
42	1041	.05	
43	1042	.10	
44	1043	.12	
45	1044	.127	
46	1045	.134	
47	1046	.173	
48	1047	.180	
49	1048	.186	
50	1049	.193	
51	1050	.20	
52	1051	.25	
53	1052	.30	
54	1053	.40	
55	1054	.50	
56	1055	.60	
57	1056	.70	
58	1057	.75	
59	1058	.80	
60	1059	.875	
61	1060	.925	
62	1061	.953	
63	1062	.967	
64	1063	.980	
65	1064	.994	
66	1065	.115	135
67	1066	.143	
68	1067	.171	
69	1068	.20	
70	1069	.30	
71	1070	.50	
72	1071	.60	
73	1072	.70	
74	1073	.80	
75	1074	.953	
76	1075	.967	
77	1076	.980	
78	1077	.994	
79	1078	.20	180
80	1079	.40	
81	1080	.60	
82	1081	.70	
83	1082	.75	
84	1083	.80	
85	1084	.953	
86	1085	.967	
87	1086	.98	
88	1087	.994	
89	1088	.115	225
90	1089	.146	
91	1090	.177	
92	1091	.60	
93	1092	.70	
94	1093	.80	
95	1094	.115	256
96	1095	.128	
97	1096	.146	

CONSTANT SET 822

IH-72

LEFT SRB

SWITCH POSITION 2

Ch. No.	T/C	X/L	ψ
1	1097	.20	256
2	1098	.40	
3	1099	.60	
4	1100	.80	
5	1101	.875	
6	1102	.05	270
7	1103	.10	
8	1104	.115	
9	1105	.146	
10	1110	.953	
11	1111	.967	
12	1112	.980	
13	1113	.994	
14	1114	.115	284
15	1115	.128	
16	1116	.146	
17	1117	.20	
18	1118	.40	
19	1119	.60	
20	1120	.80	
21	1121	.875	
22	1122	.115	315
23	1123	.146	
24	1124	.177	
25	1125	.20	
26	1126	.30	
27	1127	.50	
28	1128	.60	
29	1129	.70	
30	1130	.80	
31	1131	.875	
32	1132	.925	
33	1133	.953	

Ch. No.	T/C	X/L	ψ
34	1134	.967	315
35	1135	.980	
36	1136	.994	
37	1200	.043	65
38	1201	.05	
39	1202	.057	
40	1203	.063	
41	1204	.090	
42	1205	.10	
43	1206	.05	35
44	1207	.09	
45	1208	.10	
46	1209	.05	5
47	1210	.09	
48	1211	.10	
49	1212	.043	335
50	1213	.05	
51	1214	.057	
52	1215	.063	
53	1216	.09	
54	1217	.10	
55	1220	.965	4.38
56	1221	.975	
57	1222	.985	
58	1223	.995	
59	1224	.965	20
60	1225	.975	
61	1226	.985	
62	1227	.995	
63	1228	.965	40
64	1229	.975	
65	1230	.985	

Ch. No.	T/C	X/L	ψ
66	1231	.995	40
67	1232	.724	0
68	1233		225
69	1234		270
70	1235		315
71	1236		330
72	1237		135
73	1238	.740	180
74	1239		225
75	1240		270
76	1241		315
77	1242		0
78	1243		135
79	1244	.750	225
80	1245		315
81	1246		135
82	1247	.771	180
83	1248		225
84	1249		270
85	1250		315
86	1251		0
87	1252		135
88	1253	.932	180
89	1254		225
90	1255		270
91	1256		315
92	1257		0
93	1258		45
94	1259		135
95	1260	.939	0
96	1261		225
97	1262		270

TABLE VI. (Concluded)

CONSTANT SET 833

IH-72

LEFT SRB

SWITCH POSITION 3

Ch. No.	T/C	X/L	ψ
1	1263	.939	315
2	1264	.939	45
3	1265	.939	135
4	1266	.953	138
5	1267	.953	162
6	1268	.967	138
7	1269	.967	162
8	1270	.98	138
9	1271	.98	162
10	1272	.994	138
11	1273	.994	162
12	1274	.953	302
13	1275	↓	342
14	1276	↓	198
15	1277	↓	238
16	1278	.967	302
17	1279	↓	342
18	1280	↓	198
19	1281	↓	238
20	1282	.98	302
21	1283	↓	342
22	1284	↓	198
23	1285	↓	238
24	1286	.994	302
25	1287	↓	342
26	1288	↓	198
27	1289	↓	238
28	1290	.120	76
29	1291	.127	↓
30	1292	.134	↓
31	1293	.173	↓
32	1294	.180	↓
33	1295	.186	↓

Ch. No.	T/C	X/L	ψ
34	1296	.193	76
35	1297	.200	76

Ch. No.	T/C	X/L	ψ

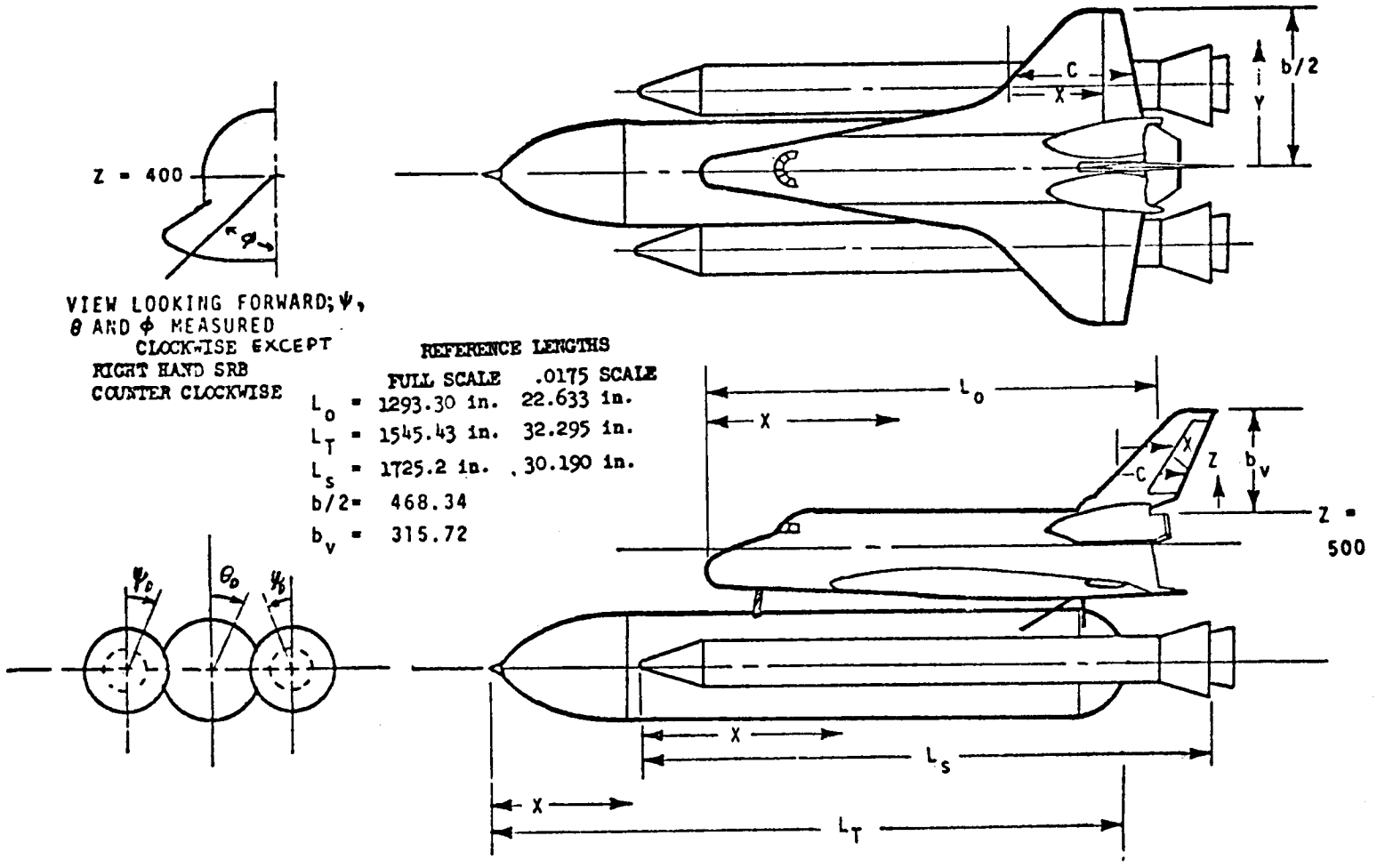


Figure 1. Space Shuttle Vehicle 5 Configuration

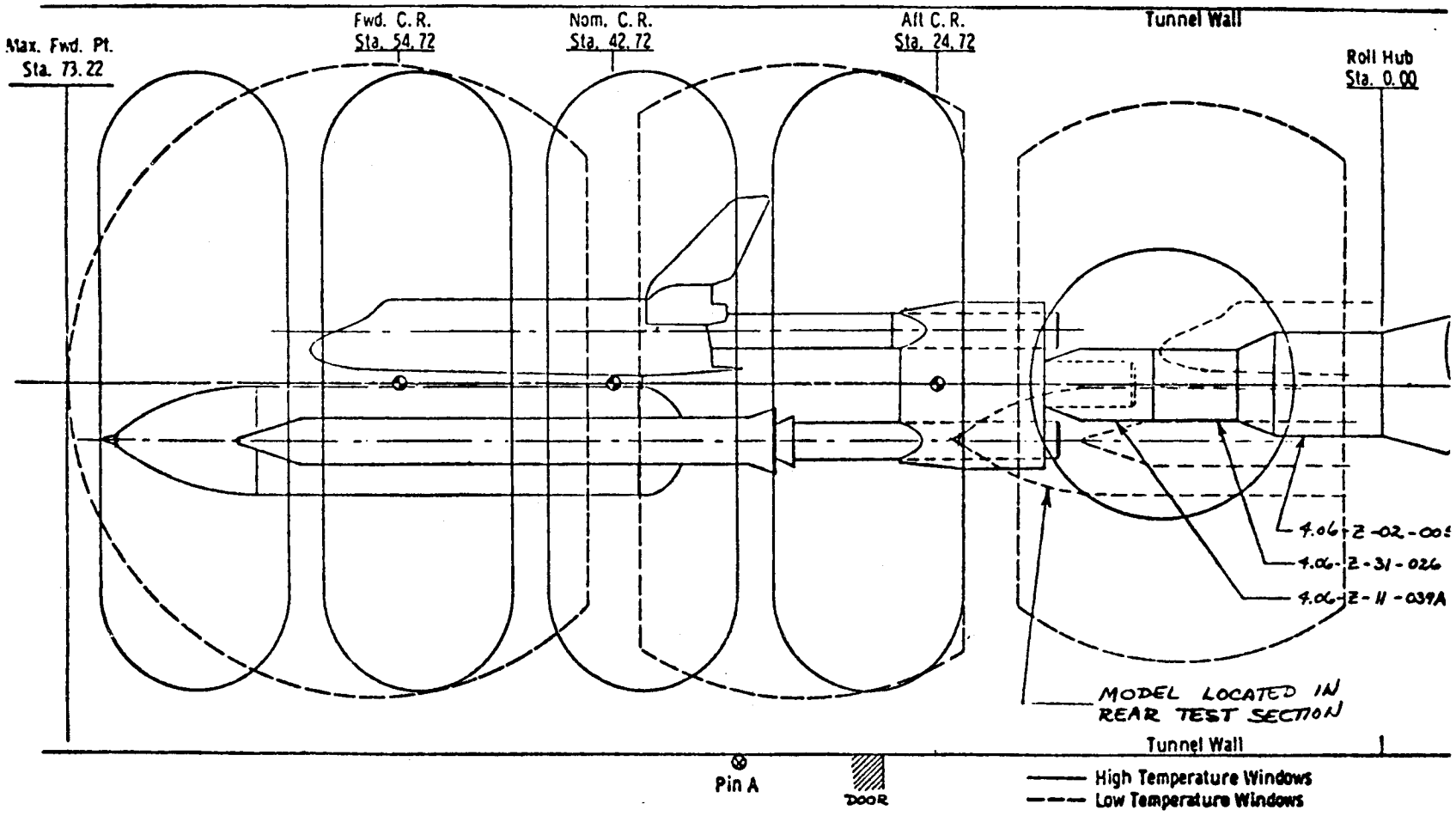


Figure 2. Sketch of Model 60-OTS Installed in AEDC-VKF Supersonic Tunnel A

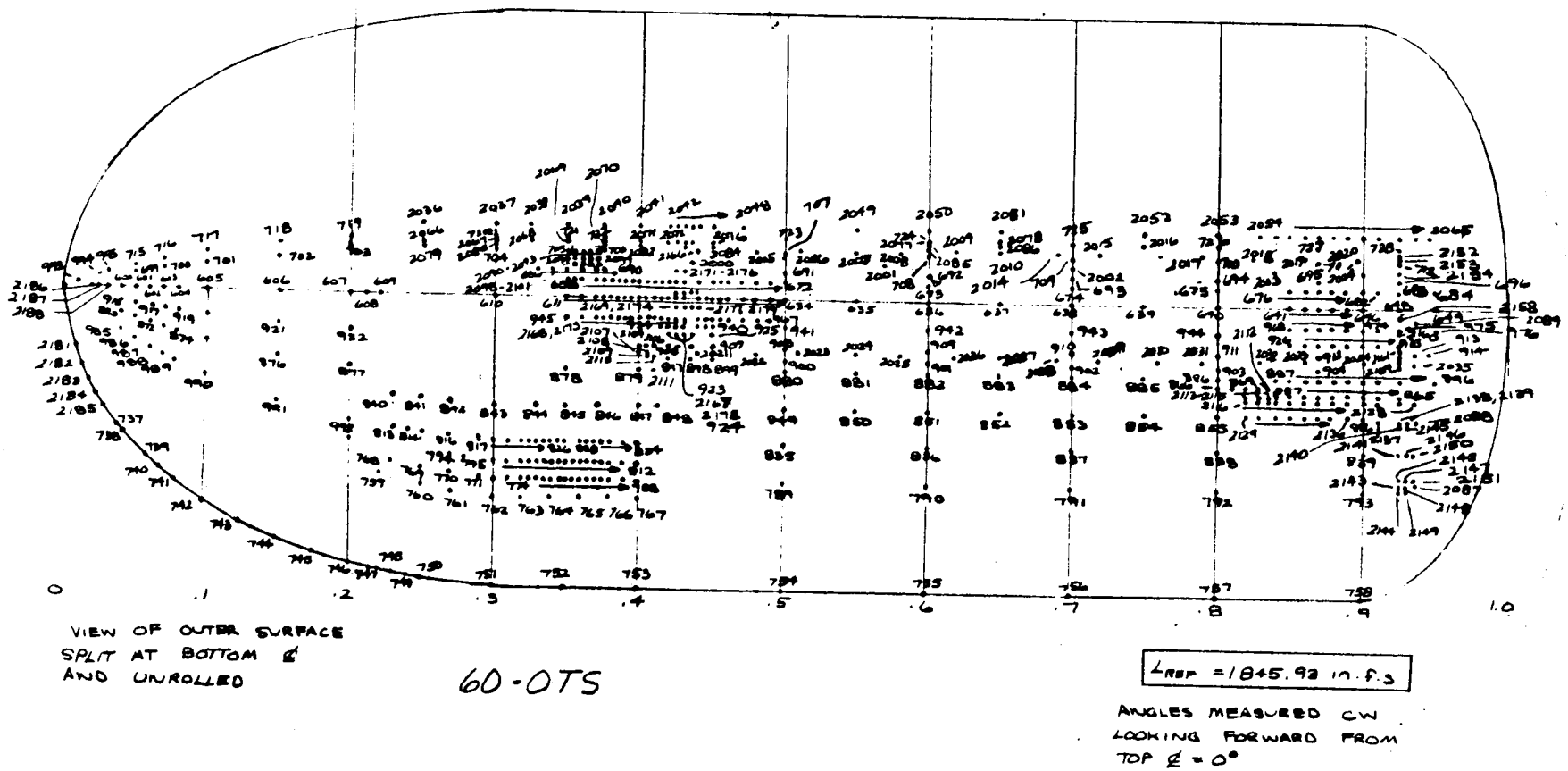


Figure 3. External Tank T/C Locations

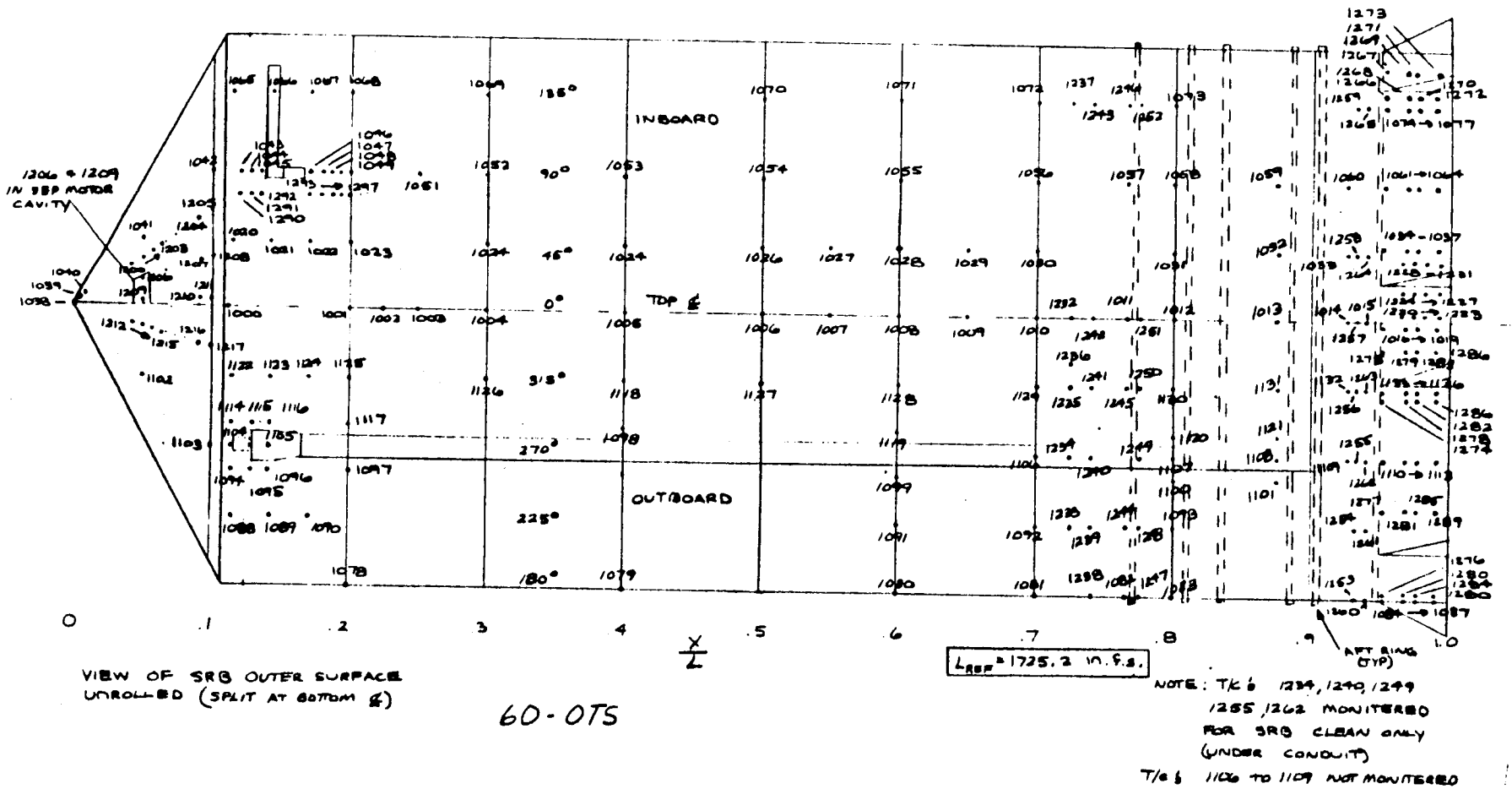


Figure 4. Left-Hand SRB T/C Locations

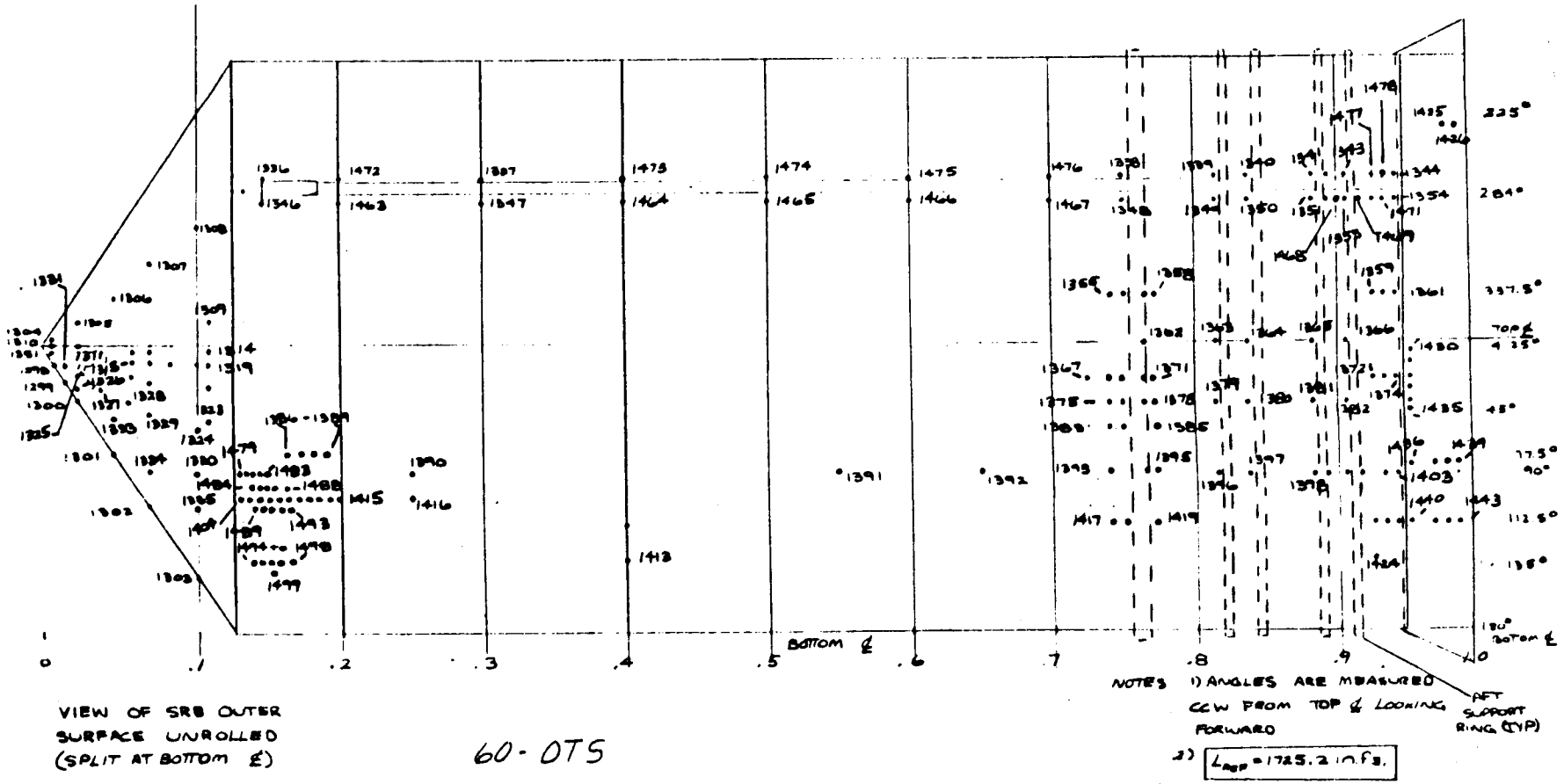
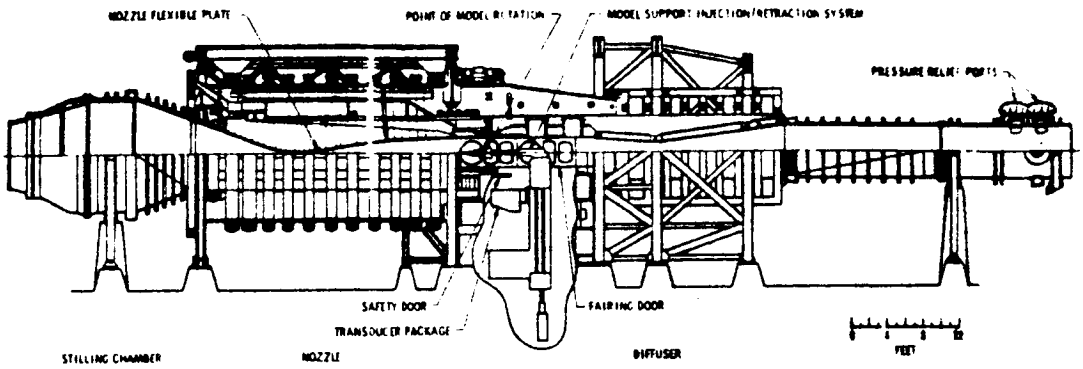
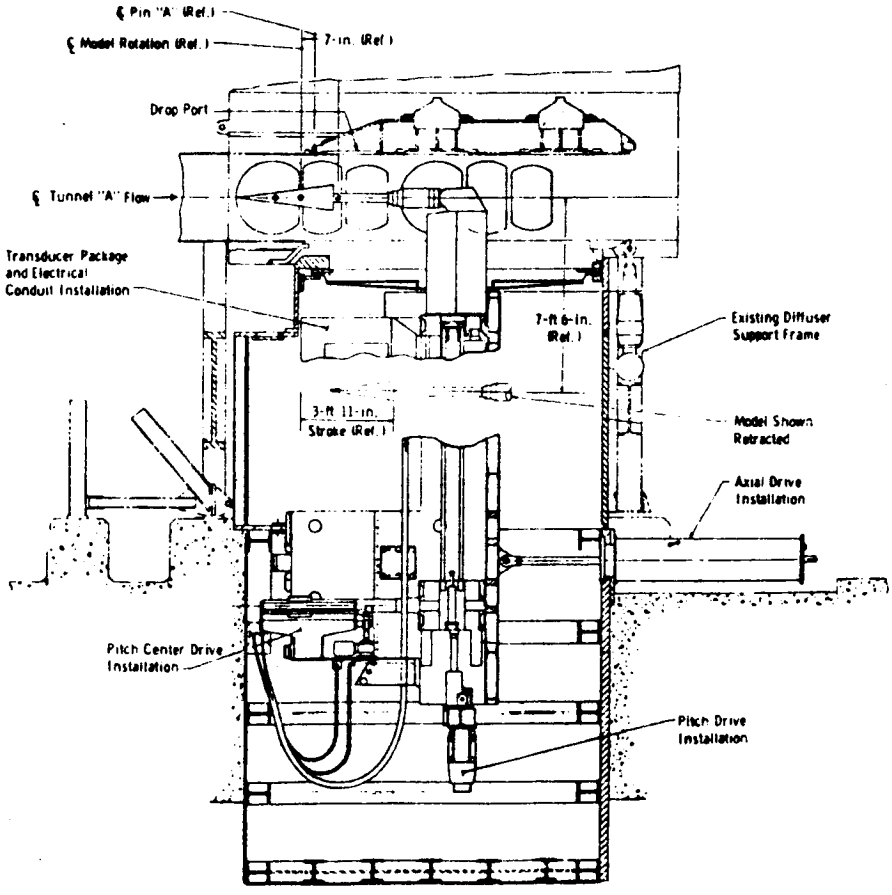


Figure 5. Right-Hand SRB T/C Locations

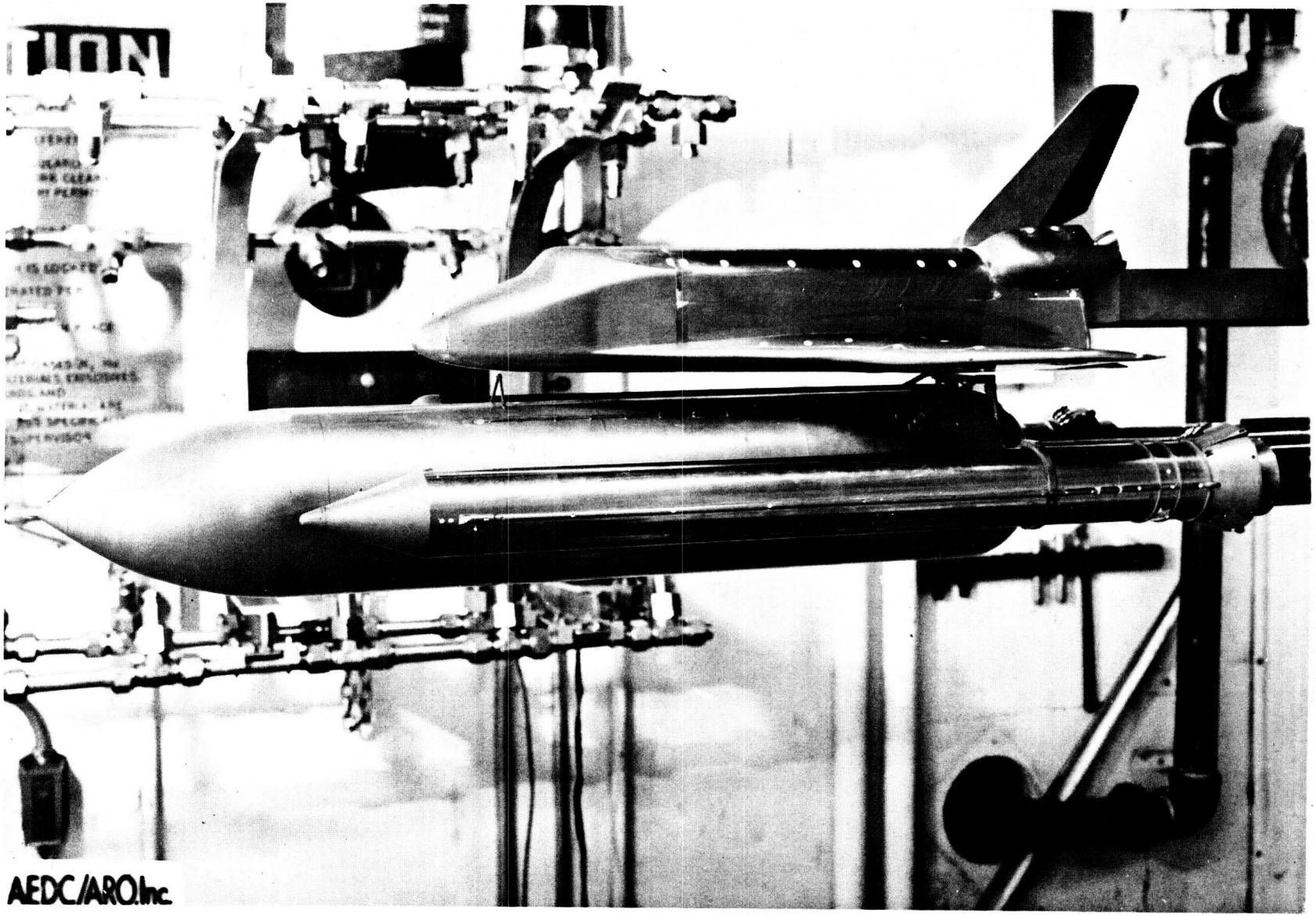


a. VKF Tunnel A

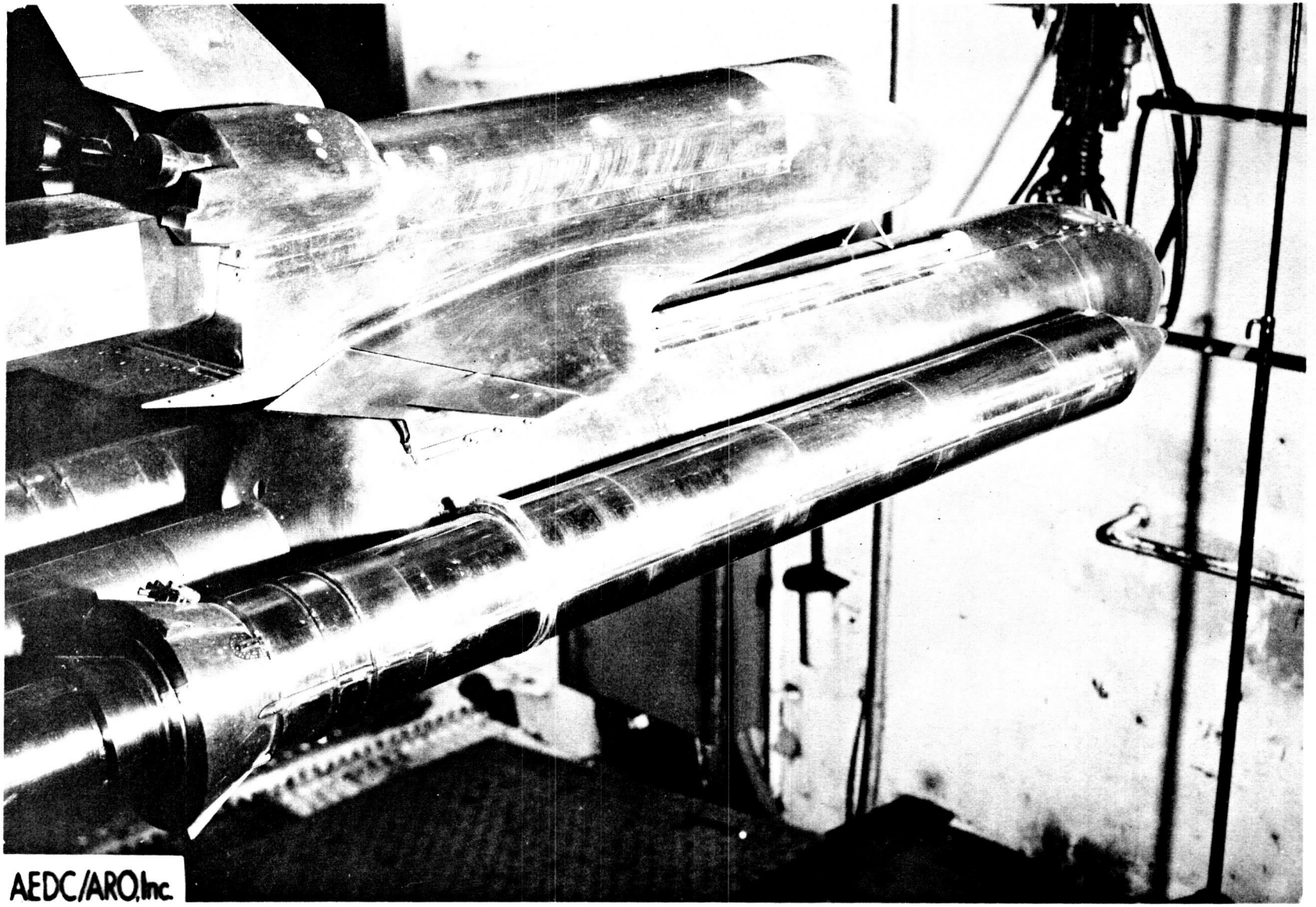


b. Model injection system

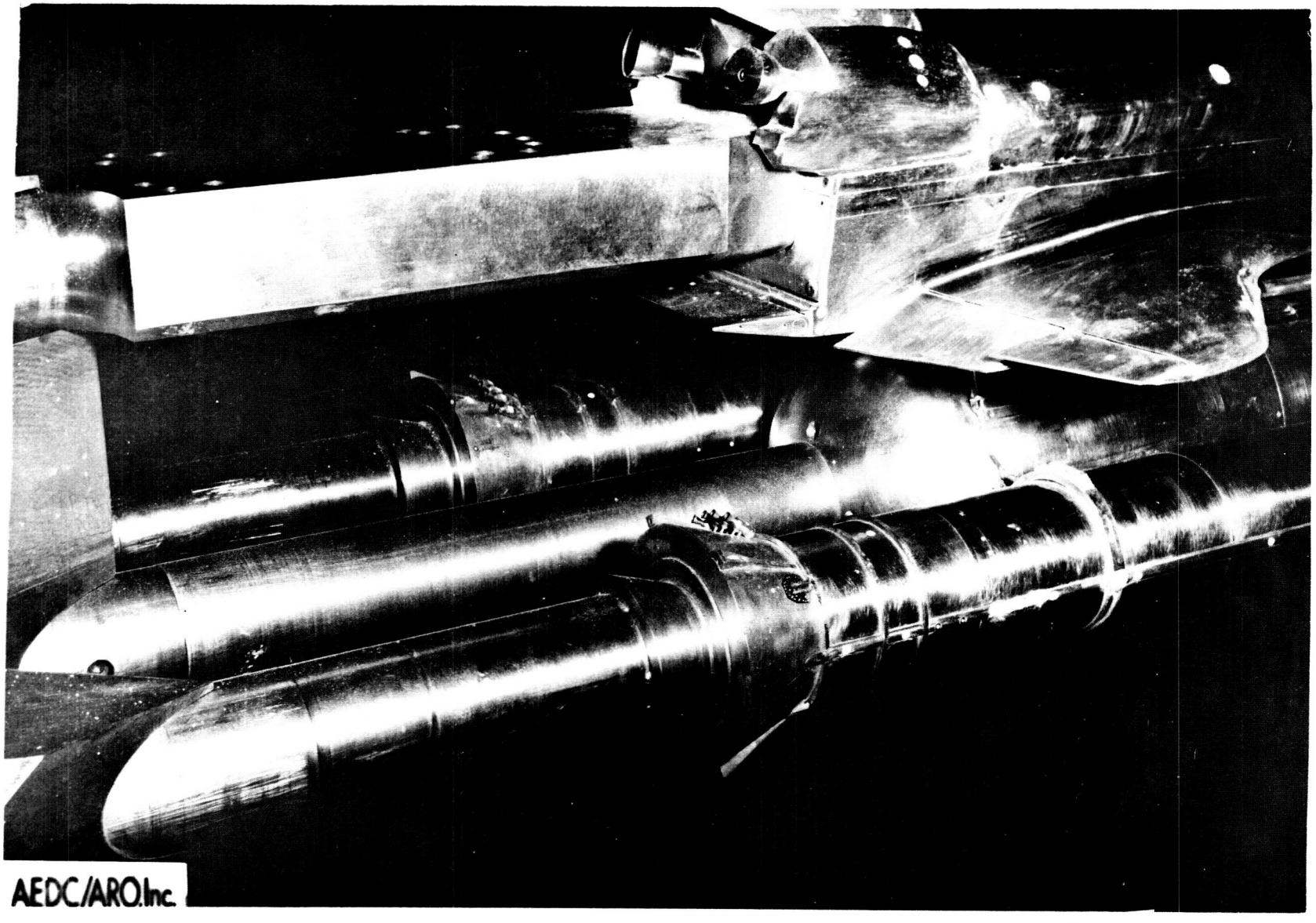
Figure 6. Wind Tunnel and Model Injection System



a. Model 60-OTS in Tunnel A - Side View
Figure 7. - Model Installation Photographs

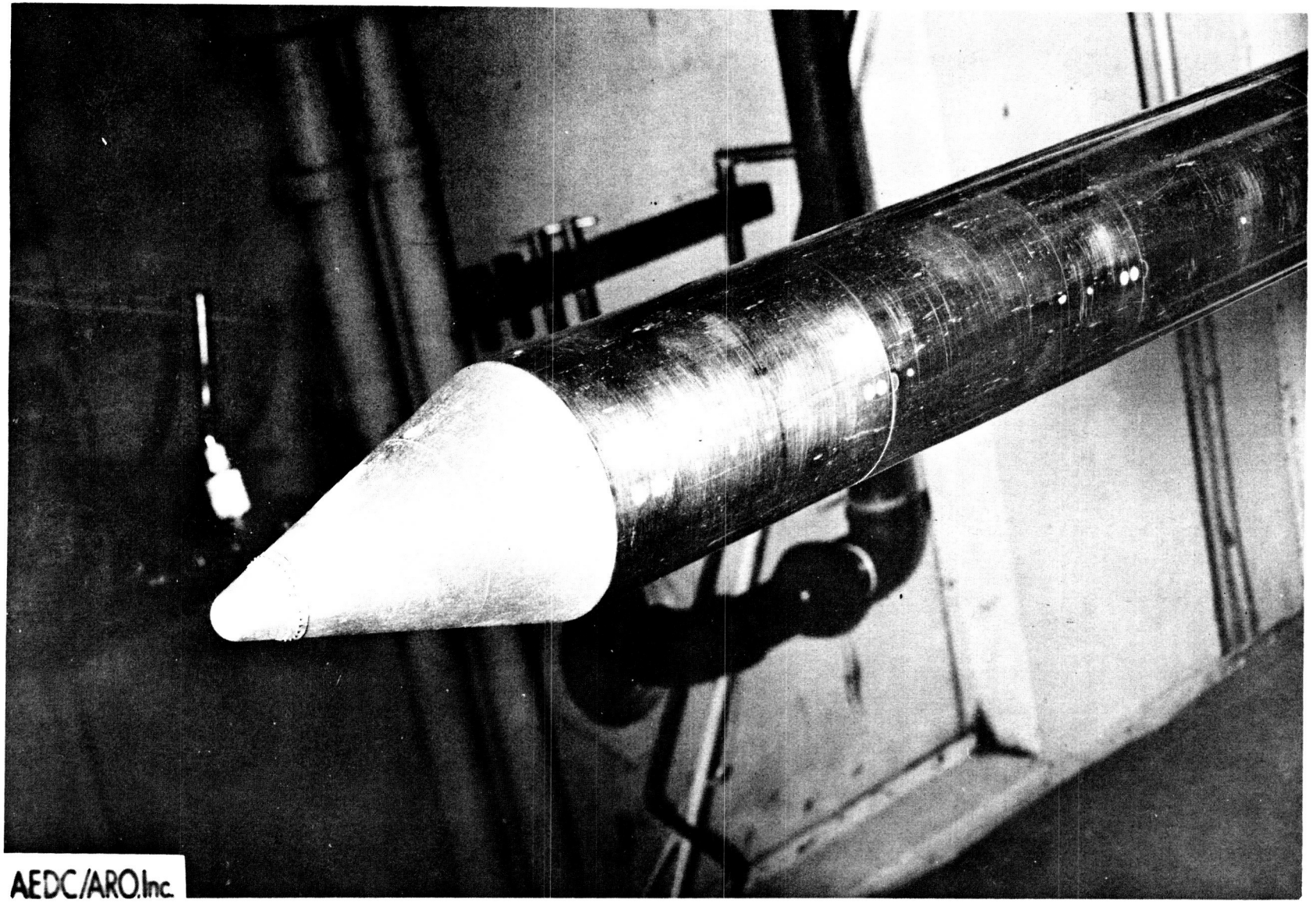


b. Model 60-OTS in Tunnel A - Rear Quarter View
Figure 7. Model Installation Photographs

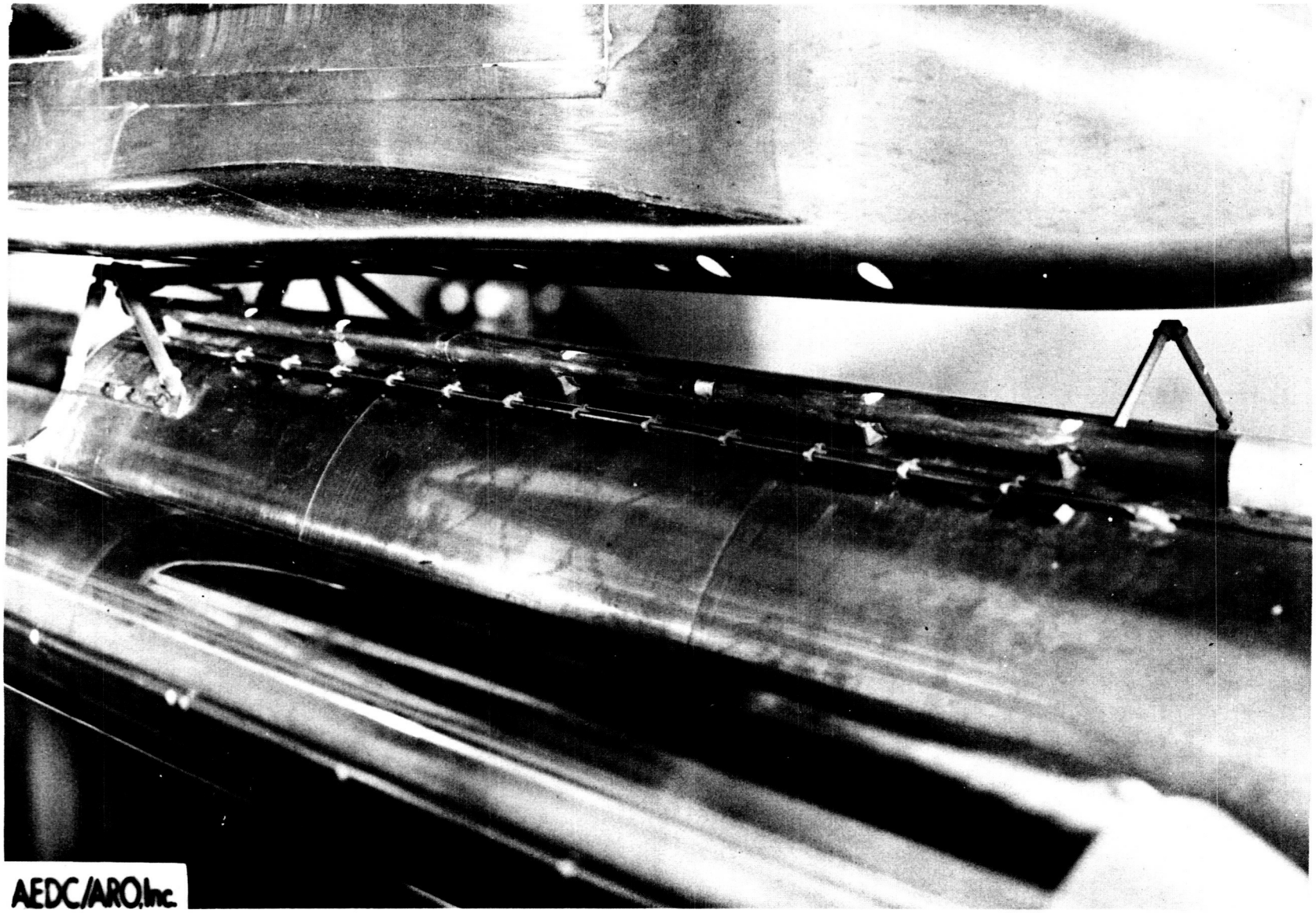


c. Model 60-OTS - Mounting Details

Figure 7. Model Installation Photographs

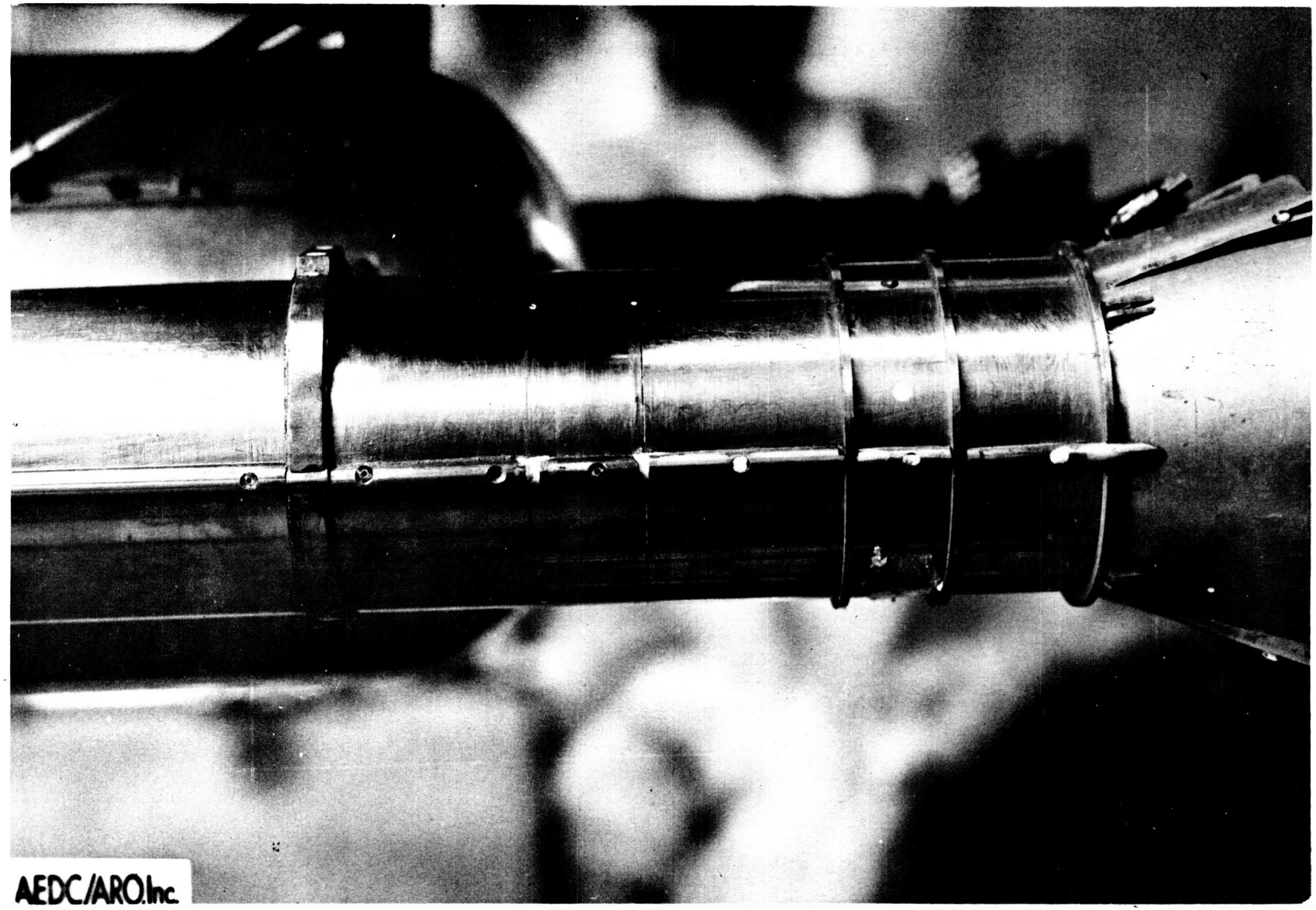


d. Model 60-S - Transition Strip Details
Figure 7. Model Installation Photographs

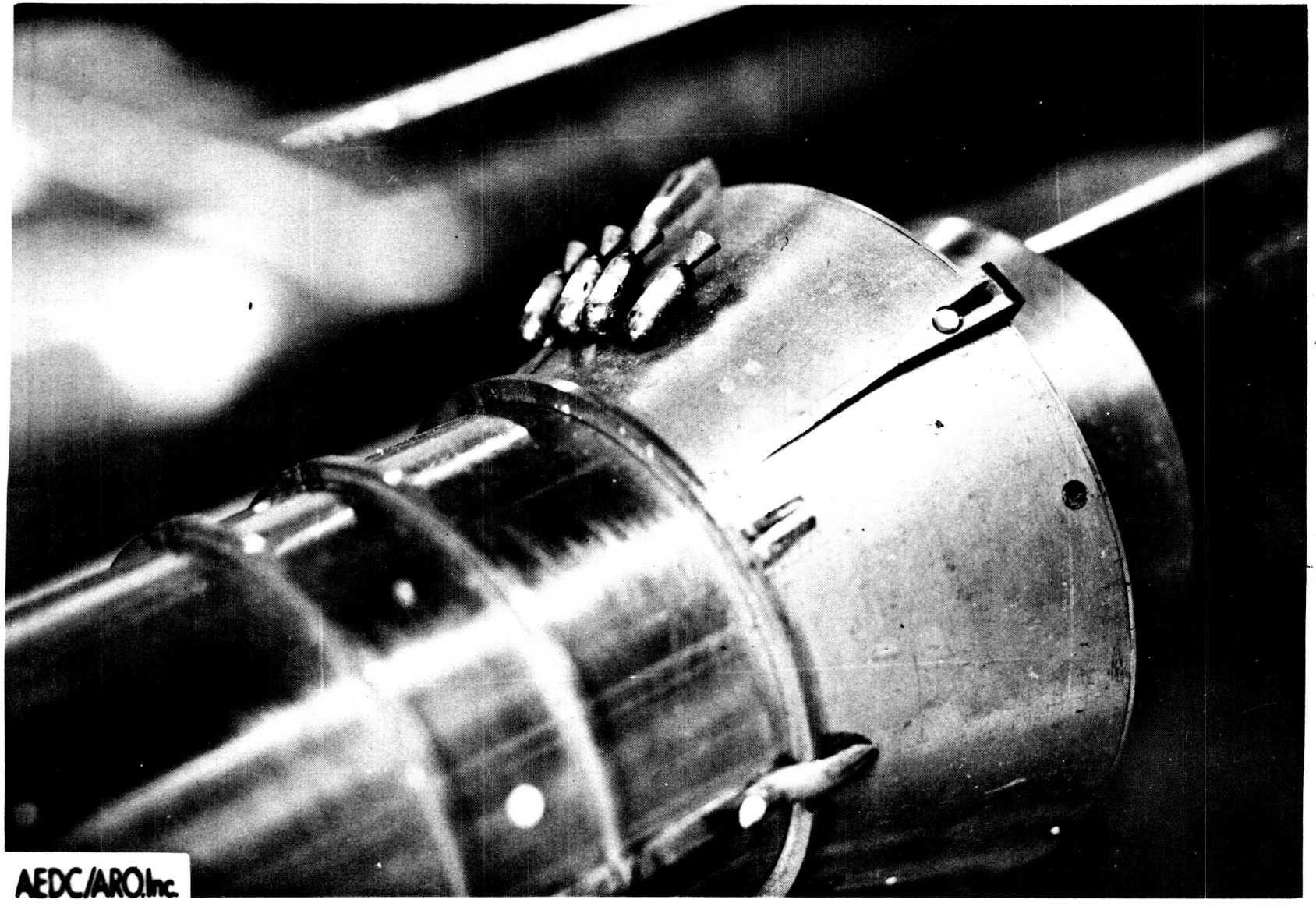


e. Model 60-OTS - External Tank Protuberance Details

Figure 7. Model Installation Photographs

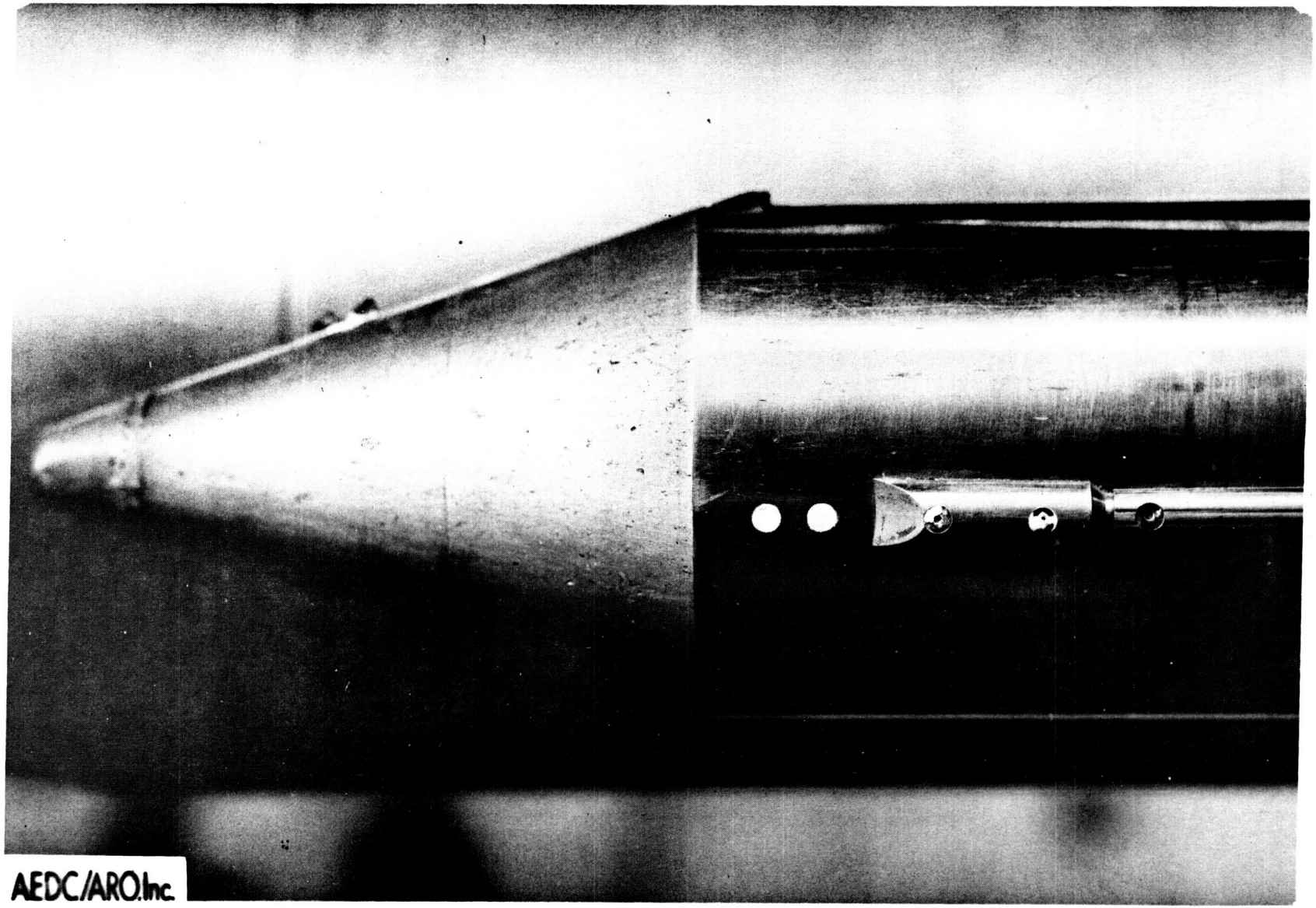


f. Model 60-S - Protuberance Details, Aft Region
Figure 7. Model Installation Photographs



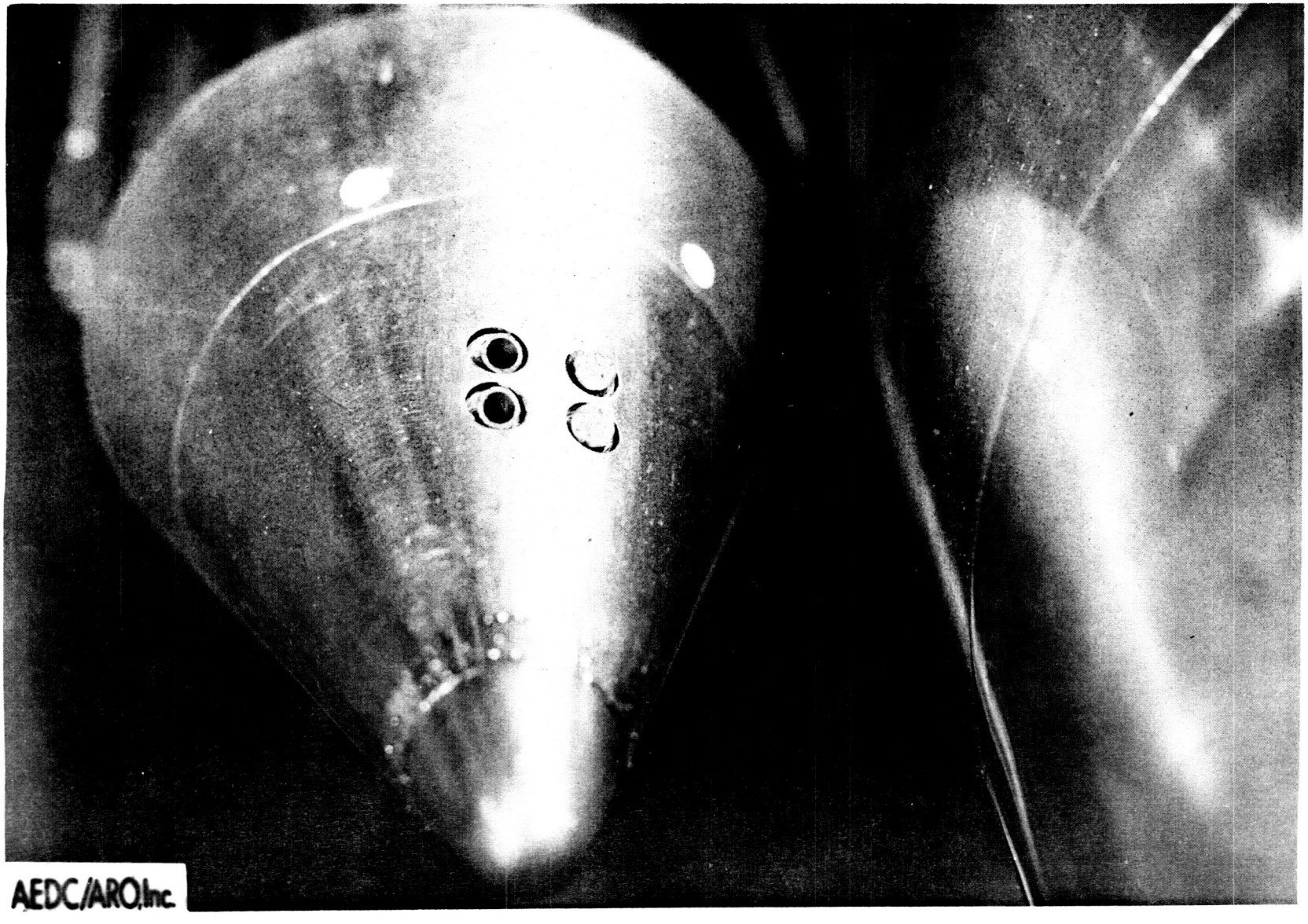
g. Model 60-S - Protuberance Details; Skirt

Figure 7. Model Installation Photographs

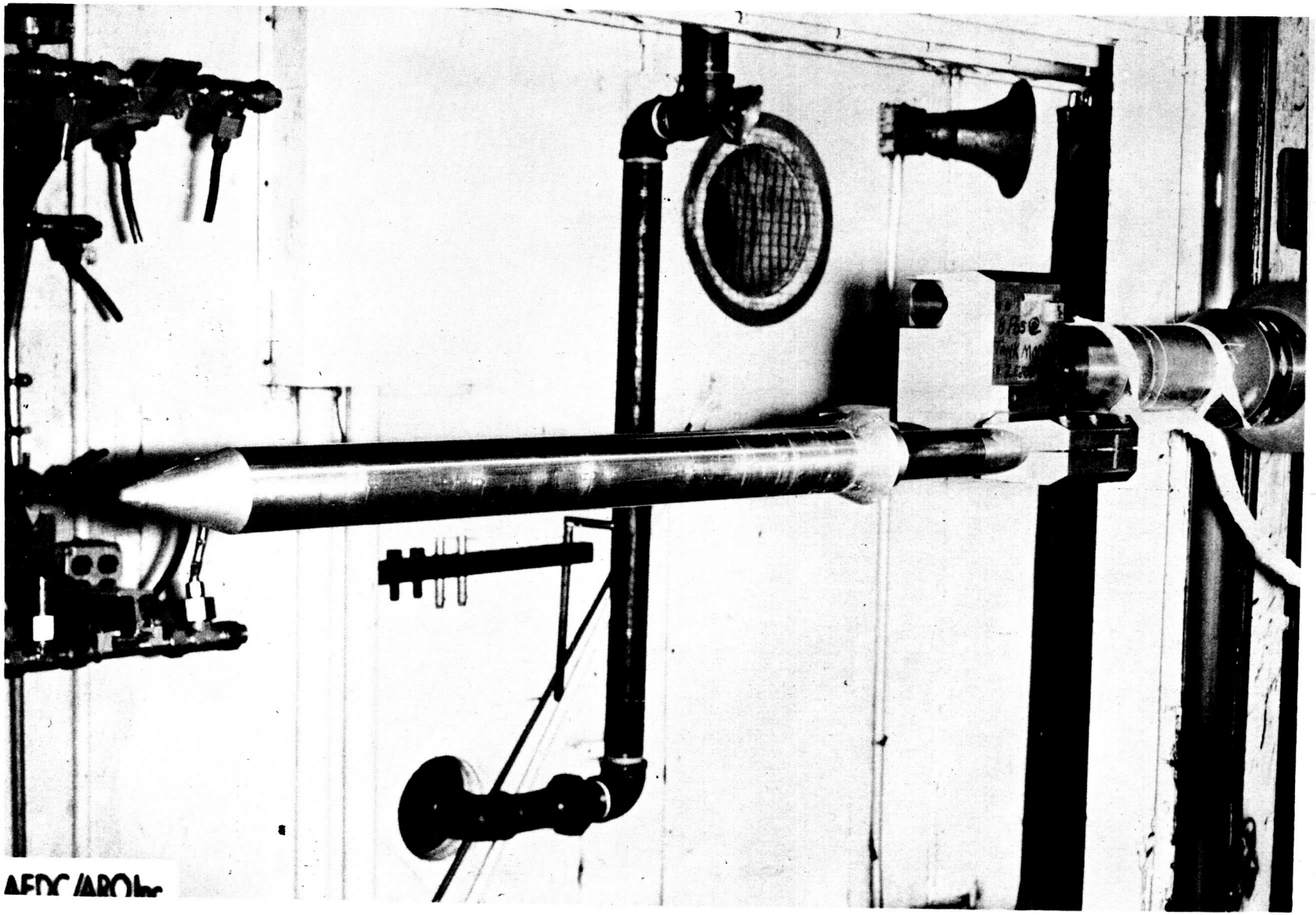


h. Model 60-S - Protuberance Detail; Forward Region

Figure 7. Model Installation Photographs



i. Model 60-S - Separation Motor Details
Figure 7. Model Installation Photographs



j. Model 60-S less Protuberances
Figure 7. Model Installation Photographs

APPENDIX

TABULATED SOURCE DATA

DATASETS	COMPONENT	PAGES
RVZR$$	RIGHT SRB	1-298
RVZL$$	LEFT SRB	299-380
RVZT$$	EXTERNAL TANK	381-638
RVZM$$	FWD SEPARATION MOTOR	639-698

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR01)

RIGHT SRB

PARAMETRIC DATA

ALPHA = -5.000 BETA = -5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
127	-5.070	-5.100	3.010	37.20	706.0	250.9	.9980	6.332	2336.	.3339-03	.2007-06	3.886
128	-5.070	-5.100	3.010	37.20	706.0	250.9	.9980	6.330	2336.	.3337-03	.2007-06	3.885

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) *.0175
127	.5554-01	.9197-02
128	.5553-01	.9199-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
128	.00000	.80000-02	1310.0	.3361	.4427	.4495	.9476	.2496-01	.1866-01	2.734	21.07	559.1
127	.00000	.25000-01	1311.0	.3487	.4690	.4769	.9476	.2648-01	.1937-01	2.665	19.24	567.9
127	.00000	.83700	1364.0	.3460-01	.4490-01	.4930-01	.9350	.2739-02	.1922-02	.2960	2.186	551.8
127	.00000	.88400	1365.0	.5720-01	.7600-01	.8430-01	.9350	.4682-02	.3176-02	.4530	3.330	563.0
127	.00000	.90700	1366.0	.5700-01	.7460-01	.8230-01	.9350	.4570-02	.3166-02	.4720	3.486	556.3
127	5.0000	.75000-01	1313.0	.2032	.2656	.2687	.9481	.1492-01	.1129-01	1.696	12.12	555.2
127	15.600	.95300	1431.0	.9960-01	.1333	.1334	.9499	.7408-02	.5532-02	.7720	5.672	565.9
127	20.000	.75000-01	1316.0	.2429	.3190	.3202	.9494	.1778-01	.1349-01	1.994	14.23	557.7
127	20.000	.10000+00	1318.0	.2336	.3049	.3061	.9494	.1700-01	.1297-01	1.956	14.44	554.8
127	20.000	.11000	1319.0	.2404	.3127	.3138	.9494	.1743-01	.1335-01	2.039	15.07	552.9
127	20.000	.95300	1432.0	.1000+00	.1318	.1316	.9502	.7309-02	.5554-02	.8130	5.990	559.2
128	22.500	.72400	1367.0	.1481	.2042	.2296	.9354	.1275-01	.8224-02	1.056	7.844	577.2
127	22.500	.74000	1368.0	.2364	.3342	.3800	.9354	.2110-01	.1313-01	1.583	11.51	585.0
127	22.500	.75000	1369.0	.2984	.4674	.5597	.9354	.3109-01	.1657-01	1.617	11.63	608.0
128	22.500	.76500	1370.0	.1747	.2330	.2581	.9354	.1433-01	.9702-02	1.369	10.23	564.5
128	22.500	.77100	1371.0	.1231	.1597	.1749	.9354	.9713-02	.6834-02	1.051	7.770	551.9
127	22.500	.92500	1372.0	.5210-01	.6650-01	.7230-01	.9354	.4015-02	.2895-02	.4730	3.512	542.3
127	22.500	.93900	1374.0	.7000-01	.9050-01	.9890-01	.9354	.5493-02	.3890-02	.6070	4.497	549.5
127	24.400	.95300	1433.0	.9200-01	.1223	.1219	.9505	.6770-02	.5111-02	.7280	5.357	563.0
127	35.000	.75000-01	1321.0	.2592	.3419	.3416	.9501	.1897-01	.1439-01	2.099	14.97	559.7

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR01)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
127	35.000	.11000	1322.0	.1983	.2577	.2575	.9501	.1430-01	.1102-01	1.688	12.70	552.3
127	35.600	.95300	1434.0	.8670-01	.1135	.1128	.9510	.6264-02	.4813-02	.7190	5.304	556.2
127	40.000	.95300	1435.0	.8570-01	.1114	.1107	.9511	.6147-02	.4759-02	.7270	5.378	552.7
127	45.000	.74000	1375.0	.2844	.4045	.4605	.9356	.2558-01	.1579-01	1.876	13.87	586.7
127	45.000	.75000	1376.0	.3434	.5265	.6219	.9356	.3454-01	.1907-01	1.935	14.18	604.1
128	45.000	.76500	1377.0	.2202	.3008	.3363	.9356	.1867-01	.1223-01	1.610	11.78	574.0
128	45.000	.77100	1378.0	.2240	.2976	.3287	.9356	.1825-01	.1244-01	1.775	13.05	562.9
128	45.000	.81500	1379.0	.3920-01	.5060-01	.5520-01	.9356	.3064-02	.2175-02	.3400	2.521	549.1
128	45.000	.88400	1381.0	.4890-01	.6300-01	.6860-01	.9356	.3812-02	.2714-02	.4280	3.172	547.9
128	45.000	.90700	1382.0	.5720-01	.7280-01	.7900-01	.9356	.4387-02	.3178-02	.5240	3.896	540.8
127	65.000	.11000	1323.0	.2531	.3365	.3371	.9497	.1872-01	.1406-01	2.002	14.49	563.1
127	67.500	.74000	1383.0	.3230	.4617	.5277	.9354	.2931-01	.1794-01	2.107	15.57	588.1
127	67.500	.75000	1384.0	.6037	.9417	1.125	.9354	.6249-01	.3353-01	3.296	24.12	607.2
128	67.500	.77100	1385.0	.2615	.3470	.3835	.9354	.2130-01	.1452-01	2.078	15.29	562.5
127	76.000	.10000+00	1324.0	.2079	.2764	.2784	.9489	.1546-01	.1154-01	1.642	12.08	563.3
127	76.000	.14100	1386.0	.2593	.3512	.3921	.9353	.2178-01	.1440-01	1.942	14.23	570.7
127	76.000	.14800	1387.0	.1878	.2420	.2644	.9353	.1468-01	.1043-01	1.642	12.17	548.1
127	76.000	.15500	1388.0	.1394	.1767	.1918	.9353	.1065-01	.7741-02	1.293	9.632	538.4
127	76.000	.16200	1389.0	.1219	.1540	.1669	.9353	.9271-02	.6769-02	1.145	8.539	536.3
127	76.000	.25000	1390.0	.4170-01	.5180-01	.5580-01	.9353	.3099-02	.2317-02	.4190	3.193	524.8
127	77.500	.95300	1436.0	.5910-01	.7500-01	.7520-01	.9496	.4175-02	.3284-02	.5460	4.068	539.1
127	77.500	.99400	1439.0	.6560-01	.8580-01	.8600-01	.9496	.4777-02	.3644-02	.5460	4.031	555.7
128	90.000	.15000-01	1325.0	.3005	.3958	.4019	.9476	.2232-01	.1669-01	2.446	18.33	559.1
127	90.000	.25000-01	1326.0	.3519	.4781	.4865	.9476	.2702-01	.1954-01	2.611	18.81	571.9
128	90.000	.40000-01	1327.0	.2768	.3649	.3705	.9476	.2058-01	.1537-01	2.245	16.54	559.5
127	90.000	.60000-01	1328.0	.1988	.2592	.2630	.9476	.1461-01	.1104-01	1.671	11.57	554.2
127	90.000	.75000-01	1329.0	.1244	.1594	.1616	.9476	.8976-02	.6911-02	1.110	7.609	544.9
128	90.000	.13230	1479.0	.3766	.7432	1.049	.9350	.5825-01	.2091-01	1.496	10.62	634.1
128	90.000	.13390	1480.0	.4002	.8571	1.303	.9350	.7233-01	.2222-01	1.471	10.42	639.4
128	90.000	.13560	1481.0	.3521	.5885	.7367	.9350	.4091-01	.1955-01	1.717	12.29	617.8
128	90.000	.13730	1482.0	.2828	.4010	.4585	.9350	.2546-01	.1570-01	1.878	13.66	586.0
128	90.000	.13890	1483.0	.1974	.2629	.2919	.9350	.1621-01	.1096-01	1.553	11.42	564.0
128	90.000	.55000	1391.0	.8170-01	.1052	.1151	.9350	.6393-02	.4539-02	.7170	5.318	547.6
128	90.000	.65000	1392.0	.9490-01	.1224	.1340	.9350	.7441-02	.5268-02	.8270	6.129	548.6
127	90.000	.74000	1393.0	.3500-01	.4510-01	.4930-01	.9350	.2737-02	.1945-02	.3080	2.323	547.1
127	90.000	.76500	1394.0	.1685	.2175	.2383	.9350	.1324-01	.9358-02	1.464	10.85	549.1
127	90.000	.77100	1395.0	.1129	.1454	.1591	.9350	.8834-02	.6270-02	.9900	7.339	547.6
127	90.000	.81500	1396.0	.4510-01	.5820-01	.6380-01	.9350	.3543-02	.2503-02	.3910	2.945	549.3
127	90.000	.83700	1397.0	.5240-01	.6710-01	.7330-01	.9350	.4070-02	.2913-02	.4690	3.485	544.4
127	90.000	.88400	1398.0	.5480-01	.6960-01	.7580-01	.9350	.4209-02	.3041-02	.5030	3.741	540.2
127	90.000	.89400	1399.0	.6790-01	.8520-01	.9220-01	.9350	.5123-02	.3769-02	.6530	4.882	532.1
127	90.000	.90700	1400.0	.3840-01	.4850-01	.5270-01	.9350	.2924-02	.2133-02	.3610	2.694	536.1
127	90.000	.91700	1401.0	.4790-01	.6020-01	.6520-01	.9350	.3623-02	.2662-02	.4600	3.438	532.6

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
127	90.000	.93200	1402.0	.4660-01	.5900-01	.6410-01	.9350	.3558-02	.2589-02	.4360	3.247	537.2
127	90.000	.93900	1403.0	.5040-01	.6390-01	.6950-01	.9350	.3857-02	.2798-02	.4670	3.479	538.6
128	95.000	.13560	1484.0	.3033	.4929	.6074	.9349	.3373-01	.1684-01	1.545	11.08	613.9
128	95.000	.13730	1485.0	.2171	.3088	.3540	.9349	.1966-01	.1205-01	1.431	10.40	586.9
128	95.000	.13890	1486.0	.1383	.1879	.2107	.9349	.1170-01	.7680-02	1.026	7.515	572.0
128	95.000	.14560	1487.0	.9820-01	.1265	.1386	.9349	.7696-02	.5453-02	.8590	6.366	548.1
128	95.000	.14730	1488.0	.7600-01	.9630-01	.1048	.9349	.5820-02	.4220-02	.7050	5.247	538.6
127	104.00	.10000+00	1330.0	.2557	.3455	.3554	.9460	.1974-01	.1420-01	1.927	14.13	569.8
127	104.00	.12000	1404.0	.3322	.5273	.6423	.9348	.3567-01	.1845-01	1.759	12.64	610.2
127	104.00	.12700	1405.0	.3046	.4598	.5442	.9348	.3022-01	.1692-01	1.769	12.77	601.0
127	104.00	.13400	1406.0	.2568	.3825	.4495	.9348	.2497-01	.1426-01	1.531	11.07	598.2
127	104.00	.14800	1408.0	.7540-01	.9530-01	.1037	.9348	.5758-02	.4189-02	.7080	5.275	536.6
127	104.00	.15500	1409.0	.5720-01	.7250-01	.7890-01	.9348	.4381-02	.3179-02	.5330	3.973	537.8
127	104.00	.16200	1410.0	.4230-01	.5360-01	.5840-01	.9348	.3246-02	.2347-02	.3900	2.902	539.4
127	104.00	.17300	1411.0	.5080-01	.6410-01	.6960-01	.9348	.3866-02	.2821-02	.4800	3.583	535.2
127	104.00	.18000	1412.0	.5760-01	.7250-01	.7870-01	.9348	.4372-02	.3196-02	.5470	4.081	534.4
127	104.00	.18600	1413.0	.5530-01	.6960-01	.7560-01	.9348	.4198-02	.3070-02	.5260	3.923	534.3
127	104.00	.19300	1414.0	.4350-01	.5480-01	.5940-01	.9348	.3301-02	.2417-02	.4150	3.101	533.6
127	104.00	.20000	1415.0	.2900-01	.3650-01	.3960-01	.9348	.2201-02	.1613-02	.2780	2.076	533.2
127	104.00	.25000	1416.0	.2000-01	.2510-01	.2720-01	.9348	.1510-02	.1109-02	.1920	1.460	532.2
128	112.00	.13560	1489.0	.1237	.1655	.1846	.9346	.1025-01	.6871-02	.9610	7.062	565.7
128	112.00	.13730	1490.0	.1291	.1753	.1970	.9346	.1094-01	.7168-02	.9590	7.021	571.9
128	112.00	.13890	1491.0	.1393	.1912	.2159	.9346	.1199-01	.7735-02	1.005	7.347	575.7
128	112.00	.14560	1492.0	.1175	.1518	.1667	.9346	.9256-02	.6523-02	1.019	7.546	549.4
128	112.00	.14730	1493.0	.7010-01	.9010-01	.9880-01	.9346	.5489-02	.3891-02	.6160	4.571	547.2
127	112.50	.74000	1417.0	.1355	.1835	.2059	.9346	.1143-01	.7527-02	1.016	7.445	570.6
127	112.50	.75000	1418.0	.1580	.2221	.2537	.9346	.1409-01	.8777-02	1.073	7.816	583.3
128	112.50	.77100	1419.0	.6360-01	.8450-01	.9400-01	.9346	.5218-02	.3531-02	.5040	3.766	563.0
127	112.50	.92500	1420.0	.4830-01	.6080-01	.6600-01	.9346	.3663-02	.2685-02	.4640	3.465	532.8
127	112.50	.93200	1421.0	.4450-01	.5620-01	.6120-01	.9346	.3397-02	.2473-02	.4200	3.128	535.9
127	112.50	.93900	1422.0	.4980-01	.6290-01	.6850-01	.9346	.3803-02	.2767-02	.4680	3.490	536.3
127	112.50	.95300	1440.0	.5300-01	.6710-01	.6870-01	.9457	.3817-02	.2945-02	.4940	3.680	537.8
128	112.50	.96700	1441.0	.8330-01	.1052	.1076	.9457	.5974-02	.4627-02	.7870	5.867	535.6
128	112.50	.99400	1443.0	.6810-01	.8860-01	.9100-01	.9457	.5053-02	.3782-02	.5760	4.260	553.2
128	135.00	.80000-02	1331.0	.3000-03	.4000-03	.4000-03	.9423	.2260-04	.1732-04	.3000-02	.2400-01	531.0
127	135.00	.25000-01	1332.0	.2711	.3646	.3852	.9423	.2139-01	.1506-01	2.071	15.19	568.0
128	135.00	.50000-01	1333.0	.1764	.2328	.2450	.9423	.1360-01	.9795-02	1.425	10.50	560.1
127	135.00	.75000-01	1334.0	.6730-01	.8670-01	.9080-01	.9423	.5040-02	.3739-02	.5900	4.446	547.8
127	135.00	.10000+00	1335.0	.1117	.1451	.1521	.9423	.8447-02	.6203-02	.9510	7.033	552.2
127	135.00	.40000	1423.0	.5290-01	.6850-01	.7550-01	.9345	.4191-02	.2938-02	.4540	3.418	550.9
128	135.00	.92500	1424.0	.5930-01	.7510-01	.8190-01	.9345	.4549-02	.3292-02	.5500	4.099	538.4
128	140.00	.13560	1494.0	.5700-01	.7360-01	.8090-01	.9345	.4490-02	.3166-02	.4960	3.676	548.9
128	140.00	.13730	1495.0	.6190-01	.8030-01	.8850-01	.9345	.4912-02	.3435-02	.5280	3.907	551.9

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR01)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
128	140.00	.13890	1496.0	.7480-01	.9750-01	.1076	.9345	.5975-02	.4152-02	.6290	4.648	554.1
128	140.00	.14560	1497.0	.7480-01	.9670-01	.1063	.9345	.5904-02	.4151-02	.6460	4.786	549.9
128	150.00	.14230	1499.0	.6930-01	.8920-01	.9790-01	.9345	.5437-02	.3848-02	.6080	4.511	547.5
128	180.00	.80000-02	1298.0	.3002	.4075	.4445	.9384	.2468-01	.1667-01	2.232	17.20	571.7
128	180.00	.15000-01	1299.0	.1436	.1897	.2050	.9384	.1138-01	.7972-02	1.157	8.379	560.5
127	180.00	.25000-01	1300.0	.2906	.3774	.4055	.9384	.2252-01	.1614-01	2.475	17.43	552.2
128	180.00	.50000-01	1301.0	.2338	.3077	.3321	.9384	.1844-01	.1298-01	1.905	13.38	558.8
127	180.00	.75000-01	1302.0	.9040-01	.1172	.1259	.9384	.6990-02	.5020-02	.7740	5.369	551.3
128	180.00	.10000+00	1303.0	.1633	.2173	.2354	.9384	.1307-01	.9068-02	1.287	9.466	563.7
127	225.00	.98000	1425.0	.1195	.1666	.1847	.9376	.1026-01	.6638-02	.8290	6.041	580.7
127	225.00	.99400	1426.0	.7500-01	.1023	.1125	.9376	.6246-02	.4163-02	.5500	4.023	573.5
127	263.00	.13600	1336.0	.3420-01	.4330-01	.4730-01	.9345	.2624-02	.1897-02	.3160	2.357	538.7
128	263.00	.20000	1472.0	.4040-01	.5060-01	.5500-01	.9345	.3054-02	.2241-02	.3890	2.909	531.9
128	263.00	.30000	1337.0	.4110-01	.5160-01	.5600-01	.9345	.3109-02	.2280-02	.3950	3.003	532.3
128	263.00	.40000	1473.0	.3790-01	.4830-01	.5280-01	.9345	.2930-02	.2105-02	.3460	2.570	541.4
128	263.00	.50000	1474.0	.3260-01	.4120-01	.4480-01	.9345	.2490-02	.1808-02	.3050	2.273	536.9
128	263.00	.60000	1475.0	.3350-01	.4210-01	.4570-01	.9345	.2539-02	.1859-02	.3210	2.394	533.1
128	263.00	.75000	1338.0	.8050-01	.1034	.1135	.9345	.6300-02	.4472-02	.7120	5.283	546.3
128	263.00	.81500	1339.0	.6130-01	.7720-01	.8390-01	.9345	.4661-02	.3406-02	.5850	4.366	533.9
128	263.00	.83700	1340.0	.6020-01	.7570-01	.8220-01	.9345	.4566-02	.3344-02	.5780	4.313	532.9
128	263.00	.88400	1341.0	.5320-01	.6870-01	.7540-01	.9345	.4190-02	.2955-02	.4630	3.434	548.8
128	263.00	.89400	1342.0	.6570-01	.8330-01	.9090-01	.9345	.5045-02	.3648-02	.6090	4.533	538.7
128	263.00	.92800	1477.0	.6010-01	.7820-01	.8620-01	.9345	.4788-02	.3340-02	.5100	3.773	552.8
127	263.00	.93900	1344.0	.7560-01	.9940-01	.1102	.9345	.6119-02	.4199-02	.6190	4.561	558.2
128	270.00	.80000-02	1304.0	.2023	.2608	.2796	.9384	.1553-01	.1123-01	1.766	14.02	548.4
128	270.00	.50000-01	1306.0	.2243	.2959	.3196	.9384	.1775-01	.1246-01	1.817	12.75	559.8
127	270.00	.75000-01	1307.0	.1299	.1690	.1817	.9384	.1009-01	.7212-02	1.099	7.739	553.1
128	270.00	.10000+00	1308.0	.2380	.3161	.3422	.9384	.1900-01	.1322-01	1.887	13.88	562.8
127	270.00	.11500	1345.0	.9710-01	.1285	.1428	.9345	.7931-02	.5393-02	.7790	5.735	561.1
127	277.00	.13600	1346.0	.2900-01	.3670-01	.3990-01	.9345	.2217-02	.1613-02	.2730	2.038	536.0
127	277.00	.30000	1347.0	.5790-01	.7190-01	.7770-01	.9345	.4315-02	.3218-02	.5850	4.464	523.8
128	277.00	.40000	1464.0	.5310-01	.6740-01	.7350-01	.9345	.4080-02	.2949-02	.4910	3.659	539.0
128	277.00	.60000	1466.0	.2270-01	.2870-01	.3120-01	.9345	.1734-02	.1262-02	.2140	1.598	535.9
128	277.00	.70000	1467.0	.3820-01	.4820-01	.5250-01	.9345	.2915-02	.2124-02	.3620	2.698	535.3
127	277.00	.75000	1348.0	.2120-01	.2700-01	.2950-01	.9345	.1637-02	.1176-02	.1930	1.436	541.4
127	277.00	.81500	1349.0	.3820-01	.4820-01	.5250-01	.9345	.2914-02	.2122-02	.3610	2.692	535.5
127	277.00	.83700	1350.0	.2770-01	.3510-01	.3830-01	.9345	.2125-02	.1538-02	.2570	1.915	538.3
127	277.00	.88400	1351.0	.1140-01	.1480-01	.1630-01	.9345	.9075-03	.6336-03	.9700-01	.7180	552.4
127	277.00	.89400	1352.0	.5780-01	.7380-01	.8070-01	.9345	.4480-02	.3210-02	.5240	3.891	542.5
128	277.00	.90000	1468.0	.1960-01	.2550-01	.2810-01	9345	.1561-02	.1086-02	.1650	1.220	553.6
128	277.00	.92100	1469.0	.3420-01	.4430-01	.4870-01	.9345	.2705-02	.1898-02	.2940	2.176	550.7
128	277.00	.92800	1470.0	.2000-01	.2640-01	.2930-01	.9345	.1624-02	.1110-02	.1620	1.193	559.7
128	277.00	.93700	1471.0	.2950-01	.3940-01	.4400-01	.9345	.2444-02	.1638-02	.2300	1.687	565.4

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
128	335.00	.11000	1309.0	.2217	.2915	.3016	.9447	.1675-01	.1231-01	1.813	13.37	558.3
127	337.50	.74000	1355.0	.1018	.1390	.1566	.9346	.8699-02	.5651-02	.7440	5.442	573.9
127	337.50	.75000	1356.0	.7380-01	.1057	.1220	.9346	.6774-02	.4099-02	.4790	3.535	588.7
128	337.50	.76500	1357.0	.1379	.1786	.1965	.9346	.1091-01	.7655-02	1.184	8.907	551.0
128	337.50	.92500	1359.0	.6000-01	.7980-01	.8880-01	.9346	.4930-02	.3334-02	.4750	3.492	563.2
128	337.50	.93200	1360.0	.6700-01	.9030-01	.1011	.9346	.5615-02	.3718-02	.5070	3.721	569.1
128	337.50	.93900	1361.0	.7050-01	.9670-01	.1091	.9346	.6058-02	.3914-02	.5100	3.730	575.3

RIGHT SRB

PARAMETRIC DATA

ALPHA = -5.000 BETA = .0000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
123	-5.060	.0000	3.010	37.20	706.0	251.0	.9980	6.332	2336.	.3338-03	.2007-06	3.885
124	-5.060	.0000	3.010	37.30	706.0	250.9	.9990	6.336	2336.	.3340-03	.2007-06	3.888

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
123	.5554-01	.9199-02
124	.5556-01	.9195-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
124	.00000	.80000-02	1310.0	.3645	.4812	.4884	.9477	.2713-01	.2025-01	2.947	22.69	560.1
123	.00000	.25000-01	1311.0	.3954	.5391	.5483	.9477	.3045-01	.2196-01	2.907	20.92	573.3
123	.00000	.83700	1364.0	.9370-01	.1227	.1352	.9350	.7508-02	.5206-02	.7790	5.748	556.1
123	.00000	.88400	1365.0	.1494	.2021	.2259	.9350	.1255-01	.8299-02	1.124	8.235	570.3
123	.00000	.90700	1366.0	.1156	.1552	.1729	.9350	.9605-02	.6419-02	.8870	6.513	567.4
123	5.0000	.75000-01	1313.0	.2420	.3134	.3178	.9477	.1765-01	.1344-01	2.080	14.90	550.9
123	15.600	.95300	1431.0	.1783	.2408	.2438	.9483	.1354-01	.9904-02	1.346	9.868	569.8
123	20.000	.75000-01	1316.0	.2706	.3520	.3577	.9473	.1987-01	.1503-01	2.294	16.41	553.1
123	20.000	.10000+00	1318.0	.2532	.3295	.3349	.9473	.1860-01	.1406-01	2.141	15.82	553.4
123	20.000	.11000	1319.0	.2460	.3197	.3248	.9473	.1804-01	.1366-01	2.091	15.46	552.6
123	20.000	.95300	1432.0	.1215	.1611	.1631	.9481	.9058-02	.6746-02	.9680	7.120	562.2
124	22.500	.72400	1367.0	.1733	.2351	.2635	.9349	.1464-01	.9627-02	1.291	9.619	571.5
123	22.500	.74000	1368.0	.3136	.4491	.5164	.9349	.2868-01	.1742-01	2.036	14.78	588.8
123	22.500	.75000	1369.0	.5171	.8199	.9954	.9349	.5529-01	.2872-01	2.744	19.72	610.1
124	22.500	.76500	1370.0	.2068	.2722	.3008	.9349	.1671-01	.1149-01	1.687	12.65	558.8
124	22.500	.77100	1371.0	.9510-01	.1209	.1317	.9349	.7316-02	.5281-02	.8710	6.482	540.6
123	22.500	.92500	1372.0	.7450-01	.9590-01	.1049	.9349	.5829-02	.4136-02	.6540	4.847	547.6
123	22.500	.93900	1374.0	.1043	.1364	.1503	.9349	.8346-02	.5793-02	.8700	6.420	555.6
123	24.400	.95300	1433.0	.1314	.1765	.1790	.9479	.9942-02	.7300-02	1.009	7.406	567.4
123	35.000	.75000-01	1321.0	.2746	.3592	.3668	.9466	.2037-01	.1525-01	2.285	16.33	555.8

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR02)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
123	35.000	.11000	1322.0	.2079	.2688	.2742	.9466	.1523-01	.1155-01	1.799	13.55	549.9
123	35.600	.95300	1434.0	.1048	.1382	.1406	.9473	.7807-02	.5818-02	.8480	6.251	559.8
123	40.000	.95300	1435.0	.9040-01	.1183	.1205	.9471	.6692-02	.5022-02	.7520	5.547	556.0
123	45.000	.74000	1375.0	.2884	.4079	.4669	.9347	.2593-01	.1602-01	1.929	14.27	585.3
123	45.000	.75000	1376.0	.4606	.6967	.8258	.9347	.4586-01	.2558-01	2.664	19.55	601.6
124	45.000	.76500	1377.0	.1955	.2597	.2886	.9347	.1604-01	.1086-01	1.549	11.39	563.0
124	45.000	.77100	1378.0	.1413	.1824	.2001	.9347	.1112-01	.7851-02	1.230	9.115	548.9
124	45.000	.81500	1379.0	.4270-01	.5450-01	.5950-01	.9347	.3303-02	.2371-02	.3870	2.874	542.5
124	45.000	.88400	1381.0	.8020-01	.1024	.1119	.9347	.6214-02	.4457-02	.7260	5.393	542.8
124	45.000	.90700	1382.0	.9120-01	.1152	.1253	.9347	.6962-02	.5066-02	.8570	6.387	536.5
123	65.000	.11000	1323.0	.2969	.3976	.4132	.9444	.2295-01	.1649-01	2.298	16.60	566.3
123	67.500	.74000	1383.0	.2827	.3975	.4545	.9346	.2524-01	.1570-01	1.918	14.20	583.5
123	67.500	.75000	1384.0	.3747	.5559	.6535	.9346	.3629-01	.2081-01	2.253	16.57	597.4
124	67.500	.77100	1385.0	.2389	.3148	.3490	.9346	.1939-01	.1327-01	1.944	14.32	559.2
123	76.000	.10000+00	1324.0	.2745	.3658	.3824	.9435	.2124-01	.1524-01	2.154	15.83	564.4
123	76.000	.14100	1386.0	.2675	.3671	.4149	.9345	.2304-01	.1486-01	1.933	14.13	575.6
123	76.000	.14800	1387.0	.1996	.2583	.2842	.9345	.1578-01	.1108-01	1.721	12.74	550.5
123	76.000	.15500	1388.0	.1464	.1860	.2030	.9345	.1127-01	.8133-02	1.349	10.04	539.8
123	76.000	.16200	1389.0	.1322	.1673	.1823	.9345	.1012-01	.7343-02	1.235	9.201	537.5
123	76.000	.25000	1390.0	.3920-01	.4870-01	.5260-01	.9345	.2922-02	.2179-02	.3960	3.021	523.9
123	77.500	.95300	1436.0	.6130-01	.7860-01	.8130-01	.9440	.4515-02	.3405-02	.5470	4.062	545.0
123	77.500	.99400	1439.0	.6190-01	.8110-01	.8420-01	.9440	.4677-02	.3438-02	.5120	3.782	556.6
124	90.000	.15000-01	1325.0	.3047	.4010	.4214	.9423	.2341-01	.1693-01	2.487	18.65	558.7
123	90.000	.25000-01	1326.0	.3704	.5122	.5442	.9423	.3022-01	.2057-01	2.621	18.82	578.3
124	90.000	.40000-01	1327.0	.2892	.3788	.3977	.9423	.2210-01	.1607-01	2.398	17.69	556.4
123	90.000	.60000-01	1328.0	.2287	.2965	.3106	.9423	.1725-01	.1270-01	1.959	13.59	551.5
123	90.000	.75000-01	1329.0	.1361	.1725	.1798	.9423	.9989-02	.7559-02	1.265	8.694	538.4
124	90.000	.13230	1479.0	.3488	.7337	1.115	.9345	.6196-01	.1938-01	1.303	9.237	638.4
124	90.000	.13390	1480.0	.3192	.7368	1.240	.9345	.6886-01	.1773-01	1.104	7.806	643.4
124	90.000	.13560	1481.0	.2831	.4896	.6327	.9345	.3515-01	.1573-01	1.315	9.397	622.0
124	90.000	.13730	1482.0	.2700	.3897	.4517	.9345	.2510-01	.1500-01	1.724	12.51	590.7
124	90.000	.13890	1483.0	.2084	.2802	.3138	.9345	.1743-01	.1158-01	1.593	11.68	568.1
124	90.000	.55000	1391.0	.8670-01	.1107	.1210	.9345	.6724-02	.4816-02	.7850	5.832	542.7
124	90.000	.65000	1392.0	.8750-01	.1123	.1231	.9345	.6839-02	.4864-02	.7790	5.777	545.6
123	90.000	.74000	1393.0	.3890-01	.5030-01	.5520-01	.9345	.3068-02	.2163-02	.3390	2.554	549.0
123	90.000	.76500	1394.0	.1954	.2563	.2838	.9345	.1576-01	.1085-01	1.610	11.88	557.3
123	90.000	.77100	1395.0	.1317	.1722	.1904	.9345	.1058-01	.7314-02	1.096	8.091	555.8
123	90.000	.81500	1396.0	.3680-01	.4770-01	.5260-01	.9345	.2919-02	.2041-02	.3140	2.360	552.0
123	90.000	.83700	1397.0	.7230-01	.9300-01	.1020	.9345	.5667-02	.4013-02	.6360	4.714	547.3
123	90.000	.88400	1398.0	.6260-01	.8050-01	.8830-01	.9345	.4905-02	.3480-02	.5530	4.104	546.7
123	90.000	.89400	1399.0	.7060-01	.8810-01	.9550-01	.9345	.5302-02	.3922-02	.6970	5.217	528.0
123	90.000	.90700	1400.0	.5450-01	.6930-01	.7560-01	.9345	.4200-02	.3027-02	.5010	3.727	540.2
123	90.000	.91700	1401.0	.5270-01	.6680-01	.7280-01	.9345	.4045-02	.2928-02	.4900	3.652	538.2

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR02)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
123	90.000	.93200	1402.0	.6020-01	.7700-01	.8420-01	.9345	.4678-02	.3346-02	.5430	4.034	543.4
123	90.000	.93900	1403.0	.5720-01	.7330-01	.8030-01	.9345	.4461-02	.3176-02	.5100	3.783	545.2
124	95.000	.13560	1484.0	.2768	.4460	.5503	.9345	.3057-01	.1538-01	1.430	10.26	612.7
124	95.000	.13730	1485.0	.2374	.3388	.3905	.9345	.2170-01	.1319-01	1.555	11.30	587.8
124	95.000	.13890	1486.0	.1763	.2416	.2730	.9345	.1517-01	.9793-02	1.278	9.340	575.2
124	95.000	.14560	1487.0	.1318	.1692	.1855	.9345	.1031-01	.7320-02	1.168	8.666	546.1
124	95.000	.14730	1488.0	.1021	.1288	.1401	.9345	.7786-02	.5675-02	.9670	7.216	535.2
123	104.00	.10000+00	1330.0	.2275	.3072	.3273	.9413	.1818-01	.1263-01	1.717	12.58	569.8
123	104.00	.12000	1404.0	.3133	.5040	.6212	.9345	.3450-01	.1740-01	1.623	11.65	612.4
123	104.00	.12700	1405.0	.3115	.4718	.5614	.9345	.3118-01	.1730-01	1.796	12.96	601.9
123	104.00	.13400	1406.0	.2556	.3832	.4535	.9345	.2519-01	.1419-01	1.504	10.86	599.8
123	104.00	.14800	1408.0	.6850-01	.8670-01	.9440-01	.9345	.5245-02	.3804-02	.6400	4.769	537.4
123	104.00	.15500	1409.0	.6830-01	.8610-01	.9370-01	.9345	.5205-02	.3792-02	.6460	4.816	535.4
123	104.00	.16200	1410.0	.4940-01	.6220-01	.6770-01	.9345	.3761-02	.2741-02	.4670	3.486	535.2
123	104.00	.17300	1411.0	.4560-01	.5750-01	.6250-01	.9345	.3470-02	.2535-02	.4350	3.245	534.1
123	104.00	.18000	1412.0	.5170-01	.6510-01	.7080-01	.9345	.3931-02	.2874-02	.4940	3.688	533.8
123	104.00	.18600	1413.0	.5050-01	.6350-01	.6900-01	.9345	.3832-02	.2803-02	.4830	3.603	533.5
123	104.00	.19300	1414.0	.4530-01	.5700-01	.6200-01	.9345	.3442-02	.2514-02	.4310	3.218	534.2
123	104.00	.20000	1415.0	.3830-01	.4820-01	.5240-01	.9345	.2911-02	.2127-02	.3650	2.722	534.2
123	104.00	.25000	1416.0	.2150-01	.2700-01	.2930-01	.9345	.1627-02	.1195-02	.2080	1.583	531.5
124	112.00	.13560	1489.0	.1492	.1960	.2171	.9345	.1206-01	.8287-02	1.224	9.023	558.0
124	112.00	.13730	1490.0	.1715	.2288	.2552	.9345	.1418-01	.9527-02	1.343	9.868	564.7
124	112.00	.13890	1491.0	.1484	.2014	.2266	.9345	.1259-01	.8242-02	1.103	8.080	571.8
124	112.00	.14560	1492.0	.1200	.1530	.1672	.9345	.9289-02	.6667-02	1.092	8.115	541.9
124	112.00	.14730	1493.0	.8370-01	.1063	.1160	.9345	.6444-02	.4652-02	.7730	5.756	539.4
123	112.50	.74000	1417.0	.1779	.2584	.3006	.9345	.1669-01	.9878-02	1.118	8.107	592.5
123	112.50	.75000	1418.0	.1768	.2734	.3292	.9345	.1828-01	.9820-02	.9810	7.062	605.8
124	112.50	.77100	1419.0	.7770-01	.1045	.1170	.9345	.6498-02	.4315-02	.5930	4.428	568.1
123	112.50	.92500	1420.0	.6450-01	.8170-01	.8910-01	.9345	.4947-02	.3583-02	.6000	4.472	538.1
123	112.50	.93200	1421.0	.7030-01	.8980-01	.9820-01	.9345	.5454-02	.3902-02	.6340	4.711	543.2
123	112.50	.93900	1422.0	.6850-01	.8760-01	.9600-01	.9345	.5331-02	.3802-02	.6130	4.548	544.5
123	112.50	.95300	1440.0	.8480-01	.1092	.1150	.9412	.6386-02	.4711-02	.7450	5.523	547.6
124	112.50	.96700	1441.0	.1019	.1285	.1346	.9412	.7479-02	.5660-02	.9650	7.199	535.1
124	112.50	.99400	1443.0	.8060-01	.1052	.1112	.9412	.6175-02	.4479-02	.6760	4.994	554.7
124	135.00	.80000-02	1331.0	.5000-03	.6000-03	.7000-03	.9394	.3687-04	.2784-04	.5000-02	.3800-01	531.0
124	135.00	.50000-01	1333.0	.1933	.2516	.2687	.9394	.1493-01	.1074-01	1.637	12.10	553.2
123	135.00	.75000-01	1334.0	.9120-01	.1161	.1232	.9394	.6840-02	.5067-02	.8350	6.320	540.8
123	135.00	.10000+00	1335.0	.1070	.1378	.1467	.9394	.8146-02	.5942-02	.9390	6.957	547.7
123	135.00	.40000	1423.0	.7090-01	.9240-01	.1021	.9345	.5669-02	.3936-02	.5950	4.472	554.4
124	135.00	.92500	1424.0	.7010-01	.8910-01	.9730-01	.9345	.5404-02	.3896-02	.6460	4.803	540.0
124	140.00	.13560	1494.0	.7290-01	.9260-01	.1010	.9345	.5614-02	.4048-02	.6710	4.990	540.0
124	140.00	.13730	1495.0	.7590-01	.9680-01	.1059	.9345	.5882-02	.4216-02	.6880	5.113	542.5
124	140.00	.13890	1496.0	.8640-01	.1106	.1212	.9345	.6732-02	.4799-02	.7730	5.735	544.7

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
124	140.00	.14560	1497.0	.8540-01	.1083	.1181	.9345	.6559-02	.4743-02	.7920	5.895	538.7
124	150.00	.14230	1499.0	.7890-01	.9970-01	.1086	.9345	.6036-02	.4382-02	.7390	5.508	537.0
124	180.00	.80000-02	1298.0	.2962	.4042	.4415	.9384	.2453-01	.1646-01	2.173	16.74	573.6
123	180.00	.15000-01	1299.0	.1724	.2248	.2418	.9384	.1344-01	.9578-02	1.449	10.53	554.3
124	180.00	.50000-01	1301.0	.3012	.3952	.4260	.9384	.2366-01	.1673-01	2.480	17.42	557.4
123	180.00	.75000-01	1302.0	.1912	.2480	.2663	.9384	.1479-01	.1062-01	1.636	11.53	551.6
124	180.00	.10000+00	1303.0	.1032	.1314	.1403	.9384	.7794-02	.5732-02	.9410	6.562	541.5
123	225.00	.98000	1425.0	.1273	.1656	.1780	.9384	.9887-02	.7073-02	1.080	7.982	553.0
123	225.00	.99400	1426.0	.6430-01	.8840-01	.9560-01	.9399	.5310-02	.3571-02	.4620	3.379	576.2
123	263.00	.13600	1336.0	.3180-01	.4320-01	.4660-01	.9399	.2589-02	.1765-02	.2350	1.722	572.4
124	263.00	.20000	1472.0	.6180-01	.7770-01	.8450-01	.9345	.4691-02	.3434-02	.5930	4.424	533.2
124	263.00	.30000	1337.0	.5620-01	.6940-01	.7480-01	.9345	.4156-02	.3120-02	.5780	4.348	520.2
124	263.00	.40000	1473.0	.6180-01	.7640-01	.8240-01	.9345	.4578-02	.3435-02	.6360	4.862	520.5
124	263.00	.50000	1474.0	.4070-01	.5090-01	.5520-01	.9345	.3066-02	.2262-02	.3980	2.980	529.5
124	263.00	.60000	1475.0	.3260-01	.4070-01	.4410-01	.9345	.2450-02	.1813-02	.3220	2.412	528.0
124	263.00	.75000	1338.0	.2310-01	.2870-01	.3100-01	.9345	.1725-02	.1283-02	.2320	1.737	525.1
124	263.00	.81500	1339.0	.1330-01	.1670-01	.1820-01	.9345	.1012-02	.7363-03	.1250	.9320	535.9
124	263.00	.83700	1340.0	.2800-01	.3480-01	.3770-01	.9345	.2092-02	.1558-02	.2820	2.114	524.7
124	263.00	.88400	1341.0	.3290-01	.4080-01	.4410-01	.9345	.2452-02	.1829-02	.3330	2.495	523.8
124	263.00	.89400	1342.0	.3810-01	.4830-01	.5260-01	.9345	.2922-02	.2117-02	.3550	2.648	537.8
124	263.00	.92800	1477.0	.7310-01	.9180-01	.9970-01	.9345	.5540-02	.4063-02	.7050	5.263	532.3
123	263.00	.93900	1344.0	.4320-01	.5510-01	.6020-01	.9345	.3347-02	.2401-02	.3920	2.917	542.2
124	270.00	.80000-02	1304.0	.5630-01	.7380-01	.8170-01	.9345	.4538-02	.3128-02	.4660	3.435	556.9
124	270.00	.50000-01	1306.0	.2310	.2966	.3102	.9423	.1723-01	.1283-01	2.046	16.26	546.2
123	270.00	.75000-01	1307.0	.2245	.2901	.3037	.9423	.1687-01	.1247-01	1.944	13.71	549.7
124	270.00	.10000+00	1308.0	.1541	.1963	.2049	.9423	.1138-01	.8557-02	1.404	9.942	541.6
123	270.00	.11500	1345.0	.1721	.2230	.2336	.9423	.1298-01	.9561-02	1.479	10.94	551.0
123	277.00	.13600	1346.0	.1297	.1706	.1891	.9345	.1050-01	.7203-02	1.060	7.818	558.5
123	277.00	.30000	1347.0	.4970-01	.6220-01	.6750-01	.9345	.3750-02	.2760-02	.4830	3.615	530.5
124	277.00	.40000	1464.0	.5940-01	.7360-01	.7940-01	.9345	.4412-02	.3297-02	.6030	4.602	522.9
124	277.00	.60000	1466.0	.5620-01	.7050-01	.7650-01	.9345	.4252-02	.3122-02	.5430	4.058	531.7
124	277.00	.70000	1467.0	.5320-01	.6670-01	.7240-01	.9345	.4023-02	.2956-02	.5150	3.847	531.5
123	277.00	.75000	1348.0	.5490-01	.6850-01	.7420-01	.9345	.4121-02	.3051-02	.5430	4.070	527.5
123	277.00	.81500	1349.0	.6260-01	.7980-01	.8720-01	.9345	.4846-02	.3479-02	.5700	4.237	541.8
123	277.00	.83700	1350.0	.6550-01	.8260-01	.8990-01	.9345	.4995-02	.3639-02	.6200	4.621	535.4
123	277.00	.88400	1351.0	.7160-01	.9040-01	.9840-01	.9345	.5466-02	.3979-02	.6760	5.039	535.8
123	277.00	.89400	1352.0	.8600-01	.1106	.1213	.9345	.6738-02	.4777-02	.7580	5.624	546.9
124	277.00	.90000	1468.0	.7390-01	.9390-01	.1025	.9345	.5695-02	.4102-02	.6780	5.044	540.4
124	277.00	.90700	1353.0	.6840-01	.8700-01	.9510-01	.9345	.5282-02	.3798-02	.6250	4.646	541.2
124	277.00	.92100	1469.0	.6840-01	.8770-01	.9610-01	.9345	.5337-02	.3801-02	.6110	4.533	545.0
124	277.00	.92800	1470.0	.6680-01	.8460-01	.9220-01	.9345	.5123-02	.3713-02	.6240	4.647	537.7
124	277.00	.93700	1471.0	.6810-01	.8740-01	.9580-01	.9345	.5324-02	.3783-02	.6040	4.480	546.0
				.8310-01	.1076	.1184	.9345	.6580-02	.4617-02	.7150	5.294	550.7

IH72, OTS W/PROTUBERANCES, RIGHT SRB H1/HREF (RVZR02)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
123	277.00	.93900	1354.0	.9200-01	.1219	.1355	.9345	.7525-02	.5110-02	.7360	5.417	561.7
124	335.00	.11000	1309.0	.2455	.3200	.3257	.9471	.1809-01	.1364-01	2.067	15.27	554.1
123	337.50	.74000	1355.0	.1326	.1803	.2022	.9349	.1123-01	.7363-02	.9820	7.189	572.3
123	337.50	.75000	1356.0	.1294	.1837	.2103	.9349	.1168-01	.7185-02	.8570	6.338	586.4
124	337.50	.76500	1357.0	.1528	.1965	.2150	.9349	.1195-01	.8491-02	1.348	10.16	546.9
124	337.50	.92500	1359.0	.6570-01	.8620-01	.9520-01	.9349	.5288-02	.3650-02	.5410	3.989	557.5
124	337.50	.93200	1360.0	.8630-01	.1150	.1279	.9349	.7103-02	.4792-02	.6760	4.968	564.6
124	337.50	.93900	1361.0	.1218	.1660	.1864	.9349	.1035-01	.6768-02	.8970	6.567	573.1

RIGHT SRB

PARAMETRIC DATA

ALPHA = -5.000 BETA = 5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
125	-5.090	5.100	3.010	37.20	706.0	251.0	.9980	6.330	2337.	.3337-03	.2008-06	3.883
126	-5.080	5.100	3.010	37.30	706.0	250.9	.9990	6.336	2336.	.3341-03	.2007-06	3.888

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
125	.5553-01	.9201-02
126	.5556-01	.9195-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
126	.00000	.80000-02	1310.0	.3642	.4958	.5046	.9476	.2803-01	.2024-01	2.690	20.58	572.7
125	.00000	.25000-01	1311.0	.3884	.5517	.5630	.9476	.3126-01	.2157-01	2.571	18.39	586.5
125	.00000	.83700	1364.0	.1196	.1567	.1728	.9350	.9594-02	.6644-02	.9910	7.312	556.6
125	.00000	.88400	1365.0	.2277	.3132	.3529	.9350	.1960-01	.1264-01	1.634	11.94	576.5
125	.00000	.90700	1366.0	.2262	.3074	.3444	.9350	.1913-01	.1256-01	1.678	12.29	572.2
125	5.0000	.75000-01	1313.0	.2550	.3388	.3455	.9471	.1918-01	.1416-01	2.021	14.39	563.0
125	15.600	.95300	1431.0	.2156	.2991	.3073	.9466	.1707-01	.1197-01	1.514	11.04	579.3
125	20.000	.75000-01	1316.0	.2761	.3692	.3813	.9453	.2117-01	.1533-01	2.146	15.26	565.8
125	20.000	.10000+00	1318.0	.2261	.3008	.3105	.9453	.1724-01	.1255-01	1.783	13.11	563.7
125	20.000	.11000	1319.0	.2256	.3011	.3109	.9453	.1726-01	.1253-01	1.764	12.96	565.0
125	20.000	.95300	1432.0	.1825	.2475	.2547	.9460	.1415-01	.1013-01	1.362	9.979	571.3
126	22.500	.72400	1367.0	.1791	.2466	.2789	.9346	.1550-01	.9949-02	1.282	9.520	576.8
125	22.500	.74000	1368.0	.2010	.2914	.3382	.9346	.1878-01	.1116-01	1.269	9.199	592.1
125	22.500	.75000	1369.0	.2863	.4704	.5861	.9346	.3255-01	.1590-01	1.434	10.28	615.6
126	22.500	.76500	1370.0	.2091	.2791	.3111	.9346	.1728-01	.1162-01	1.636	12.22	564.8
126	22.500	.77100	1371.0	.1903	.2450	.2687	.9346	.1493-01	.1057-01	1.671	12.39	547.6
125	22.500	.92500	1372.0	.6400-01	.8320-01	.9160-01	.9346	.5089-02	.3553-02	.5430	4.017	552.9
125	22.500	.93900	1374.0	.1154	.1537	.1712	.9346	.9508-02	.6406-02	.9060	6.660	564.3
125	24.400	.95300	1433.0	.1949	.2684	.2779	.9454	.1543-01	.1082-01	1.395	10.19	576.9
125	35.000	.75000-01	1321.0	.2660	.3561	.3727	.9434	.2069-01	.1477-01	2.059	14.63	566.4

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR03)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
125	35.000	.11000	1322.0	.2114	.2805	.2931	.9434	.1628-01	.1174-01	1.680	12.57	562.7
125	35.600	.95300	1434.0	.1217	.1643	.1715	.9440	.9522-02	.6758-02	.9200	6.745	569.6
125	40.000	.95300	1435.0	.8450-01	.1129	.1181	.9435	.6556-02	.4694-02	.6600	4.846	565.3
125	45.000	.74000	1375.0	.2950	.4328	.5061	.9345	.2811-01	.1638-01	1.816	13.37	594.9
125	45.000	.75000	1376.0	.5713	.9366	1.168	.9345	.6486-01	.3173-01	2.871	20.93	615.3
126	45.000	.76500	1377.0	.2981	.4052	.4559	.9345	.2533-01	.1656-01	2.211	16.19	572.1
126	45.000	.77100	1378.0	.1753	.2298	.2543	.9345	.1413-01	.9741-02	1.450	10.70	556.8
126	45.000	.81500	1379.0	.8160-01	.1057	.1164	.9345	.6466-02	.4535-02	.7020	5.195	550.8
126	45.000	.88400	1381.0	.7040-01	.9100-01	.1001	.9345	.5563-02	.3913-02	.6100	4.514	549.8
126	45.000	.90700	1382.0	.8060-01	.1034	.1134	.9345	.6298-02	.4478-02	.7170	5.317	545.6
125	65.000	.11000	1323.0	.3310	.4600	.4980	.9402	.2765-01	.1838-01	2.315	16.61	579.9
125	67.500	.74000	1383.0	.2992	.4362	.5084	.9345	.2823-01	.1661-01	1.866	13.75	593.4
125	67.500	.75000	1384.0	.4567	.7284	.8930	.9345	.4959-01	.2536-01	2.400	17.53	611.1
126	67.500	.77100	1385.0	.2516	.3398	.3812	.9345	.2118-01	.1398-01	1.900	13.92	569.7
125	76.000	.10000+00	1324.0	.3102	.4307	.4698	.9393	.2609-01	.1723-01	2.174	15.86	579.6
125	76.000	.14100	1386.0	.3474	.4872	.5567	.9345	.3091-01	.1929-01	2.372	17.27	582.8
125	76.000	.14800	1387.0	.2122	.2772	.3063	.9345	.1701-01	.1178-01	1.773	13.09	555.3
125	76.000	.15500	1388.0	.1426	.1823	.1996	.9345	.1109-01	.7916-02	1.280	9.505	544.1
125	76.000	.16200	1389.0	.1433	.1829	.2000	.9345	.1111-01	.7957-02	1.297	9.637	542.8
125	76.000	.25000	1390.0	.4060-01	.5070-01	.5490-01	.9345	.3048-02	.2257-02	.4020	3.063	527.6
125	77.500	.95300	1436.0	.5820-01	.7510-01	.7990-01	.9397	.4435-02	.3230-02	.5060	3.752	549.0
125	77.500	.99400	1439.0	.8010-01	.1065	.1142	.9397	.6343-02	.4450-02	.6350	4.672	563.0
126	90.000	.15000-01	1325.0	.3140	.4191	.4545	.9384	.2525-01	.1744-01	2.453	18.34	565.0
125	90.000	.25000-01	1326.0	.3684	.5263	.5845	.9384	.3246-01	.2046-01	2.406	17.19	588.1
126	90.000	.40000-01	1327.0	.2994	.4024	.4374	.9384	.2430-01	.1663-01	2.291	16.81	567.9
125	90.000	.60000-01	1328.0	.2470	.3247	.3503	.9384	.1945-01	.1372-01	2.024	13.99	558.2
125	90.000	.75000-01	1329.0	.1415	.1831	.1965	.9384	.1091-01	.7856-02	1.220	8.333	550.5
126	90.000	.13230	1479.0	.2366	.4851	.7191	.9345	.3995-01	.1315-01	.9060	6.424	636.7
126	90.000	.13390	1480.0	.2968	.7213	1.296	.9345	.7199-01	.1649-01	.9880	6.981	645.7
126	90.000	.13560	1481.0	.4018	.7451	1.014	.9345	.5631-01	.2232-01	1.709	12.17	629.0
126	90.000	.13730	1482.0	.4509	.7049	.8541	.9345	.4745-01	.2505-01	2.452	17.64	607.7
126	90.000	.13890	1483.0	.3863	.5568	.6450	.9345	.3584-01	.2146-01	2.473	17.95	590.4
126	90.000	.55000	1391.0	.1015	.1309	.1438	.9345	.7990-02	.5641-02	.8870	6.572	548.4
126	90.000	.65000	1392.0	.7510-01	.9640-01	.1058	.9345	.5878-02	.4170-02	.6630	4.918	546.6
125	90.000	.74000	1393.0	.1920-01	.2480-01	.2720-01	.9345	.1512-02	.1065-02	.1660	1.254	549.4
125	90.000	.76500	1394.0	.1906	.2517	.2795	.9345	.1552-01	.1058-01	1.538	11.32	560.5
125	90.000	.77100	1395.0	.1318	.1737	.1927	.9345	.1070-01	.7318-02	1.070	7.881	559.6
125	90.000	.81500	1396.0	.4540-01	.5970-01	.6610-01	.9345	.3673-02	.2523-02	.3730	2.795	558.1
125	90.000	.83700	1397.0	.5670-01	.7380-01	.8140-01	.9345	.4522-02	.3147-02	.4790	3.538	553.7
125	90.000	.88400	1398.0	.7110-01	.9180-01	.1008	.9345	.5600-02	.3950-02	.6200	4.591	548.9
125	90.000	.89400	1399.0	.6640-01	.8450-01	.9220-01	.9345	.5121-02	.3689-02	.6100	4.535	540.5
125	90.000	.90700	1400.0	.4380-01	.5610-01	.6140-01	.9345	.3409-02	.2432-02	.3920	2.914	544.4
125	90.000	.91700	1401.0	.5920-01	.7550-01	.8250-01	.9345	.4582-02	.3289-02	.5390	4.005	541.9

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
125	90.000	.93200	1402.0	.5570-01	.7150-01	.7840-01	.9345	.4354-02	.3093-02	.4940	3.662	546.1
125	90.000	.93900	1403.0	.5820-01	.7500-01	.8230-01	.9345	.4572-02	.3233-02	.5110	3.784	547.9
126	95.000	.13560	1484.0	.3033	.4936	.6128	.9345	.3405-01	.1685-01	1.542	11.06	614.1
126	95.000	.13730	1485.0	.3382	.4985	.5843	.9345	.3246-01	.1879-01	2.062	14.92	595.9
126	95.000	.13890	1486.0	.2976	.4245	.4891	.9345	.2717-01	.1653-01	1.952	14.18	587.6
126	95.000	.14560	1487.0	.1807	.2347	.2586	.9345	.1437-01	.1004-01	1.540	11.39	552.2
126	95.000	.14730	1488.0	.1378	.1752	.1913	.9345	.1063-01	.7658-02	1.266	9.417	540.3
125	104.00	.10000+00	1330.0	.2742	.3826	.4236	.9377	.2352-01	.1523-01	1.898	13.84	581.1
125	104.00	.12000	1404.0	.2842	.4653	.5798	.9345	.3220-01	.1578-01	1.431	10.25	615.1
125	104.00	.12700	1405.0	.2458	.3769	.4516	.9345	.2508-01	.1365-01	1.384	9.974	604.3
125	104.00	.13400	1406.0	.2928	.4464	.5332	.9345	.2961-01	.1626-01	1.667	12.02	603.2
125	104.00	.14800	1408.0	.9730-01	.1241	.1356	.9345	.7532-02	.5401-02	.8820	6.559	542.4
125	104.00	.15500	1409.0	.1035	.1315	.1435	.9345	.7970-02	.5746-02	.9520	7.082	540.1
125	104.00	.16200	1410.0	.7700-01	.9780-01	.1067	.9345	.5925-02	.4276-02	.7100	5.285	539.7
125	104.00	.17300	1411.0	.7470-01	.9440-01	.1028	.9345	.5709-02	.4147-02	.7010	5.222	536.8
125	104.00	.18000	1412.0	.6830-01	.8610-01	.9370-01	.9345	.5202-02	.3791-02	.6460	4.818	535.4
125	104.00	.18600	1413.0	.5920-01	.7440-01	.8090-01	.9345	.4491-02	.3286-02	.5660	4.227	533.5
125	104.00	.19300	1414.0	.4810-01	.6050-01	.6570-01	.9345	.3647-02	.2672-02	.4620	3.448	533.0
125	104.00	.20000	1415.0	.4130-01	.5200-01	.5650-01	.9345	.3139-02	.2296-02	.3950	2.952	533.6
125	104.00	.25000	1416.0	.2760-01	.3470-01	.3780-01	.9345	.2098-02	.1533-02	.2630	1.999	534.0
126	112.00	.13560	1489.0	.1638	.2186	.2440	.9345	.1355-01	.9100-02	1.280	9.403	565.0
126	112.00	.13730	1490.0	.1708	.2325	.2618	.9345	.1454-01	.9487-02	1.261	9.232	572.7
126	112.00	.13890	1491.0	.1664	.2292	.2595	.9345	.1442-01	.9244-02	1.190	8.696	576.8
126	112.00	.14560	1492.0	.1329	.1710	.1876	.9345	.1042-01	.7386-02	1.172	8.690	546.9
126	112.00	.14730	1493.0	.1125	.1443	.1581	.9345	.8786-02	.6249-02	1.000	7.422	545.5
125	112.50	.74000	1417.0	.1672	.2412	.2796	.9345	.1553-01	.9286-02	1.068	7.749	590.7
125	112.50	.75000	1418.0	.1373	.2095	.2503	.9345	.1390-01	.7623-02	.7800	5.627	603.4
126	112.50	.77100	1419.0	.6390-01	.8530-01	.9520-01	.9345	.5288-02	.3550-02	.4990	3.729	565.0
125	112.50	.92500	1420.0	.5750-01	.7340-01	.8040-01	.9345	.4463-02	.3193-02	.5190	3.853	543.3
125	112.50	.93200	1421.0	.5930-01	.7630-01	.8380-01	.9345	.4651-02	.3291-02	.5200	3.856	547.7
125	112.50	.93900	1422.0	.6350-01	.8200-01	.9010-01	.9345	.5002-02	.3525-02	.5520	4.089	549.2
125	112.50	.95300	1440.0	.6890-01	.8910-01	.9590-01	.9379	.5324-02	.3826-02	.5960	4.414	549.9
126	112.50	.96700	1441.0	.8920-01	.1144	.1228	.9379	.6823-02	.4957-02	.7950	5.897	545.3
126	112.50	.99400	1443.0	.6130-01	.8150-01	.8860-01	.9379	.4921-02	.3403-02	.4840	3.558	563.4
126	135.00	.80000-02	1331.0	.1000-03	.1000-03	.1000-03	.9372	.8028-05	.5992-05	.1000-02	.8000-02	530.8
125	135.00	.25000-01	1332.0	.2943	.4104	.4565	.9372	.2535-01	.1634-01	2.039	14.87	581.0
126	135.00	.50000-01	1333.0	.2207	.2915	.3177	.9372	.1765-01	.1226-01	1.781	13.12	560.4
125	135.00	.75000-01	1334.0	.1145	.1472	.1588	.9372	.8821-02	.6361-02	1.011	7.626	546.8
125	135.00	.10000+00	1335.0	.1190	.1555	.1688	.9372	.9375-02	.6609-02	.9930	7.334	555.5
125	135.00	.40000	1423.0	.6290-01	.8400-01	.9370-01	.9345	.5204-02	.3494-02	.4910	3.673	565.1
126	135.00	.92500	1424.0	.5750-01	.7430-01	.8170-01	.9345	.4542-02	.3193-02	.4970	3.681	549.9
126	140.00	.13560	1494.0	.9370-01	.1208	.1326	.9345	.7367-02	.5207-02	.8210	6.084	548.0
126	140.00	.13730	1495.0	.8810-01	.1141	.1256	.9345	.6975-02	.4895-02	.7590	5.616	550.6

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR03)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
126	140.00	.13890	1496.0	.8540-01	.1110	.1224	.9345	.6799-02	.4742-02	.7250	5.357	552.8
126	140.00	.14560	1497.0	.9520-01	.1228	.1348	.9345	.7491-02	.5292-02	.8330	6.174	548.2
126	150.00	.14230	1499.0	.8390-01	.1077	.1181	.9345	.6562-02	.4661-02	.7440	5.517	546.1
126	180.00	.80000-02	1298.0	.3204	.4432	.4865	.9384	.2703-01	.1780-01	2.266	17.41	578.3
126	180.00	.15000-01	1299.0	.2065	.2698	.2905	.9384	.1614-01	.1147-01	1.725	12.53	555.2
125	180.00	.25000-01	1300.0	.3253	.4348	.4717	.9384	.2619-01	.1806-01	2.531	17.71	565.6
126	180.00	.50000-01	1301.0	.2183	.2871	.3097	.9384	.1721-01	.1213-01	1.788	12.55	558.2
125	180.00	.75000-01	1302.0	.1217	.1566	.1678	.9384	.9320-02	.6756-02	1.068	7.421	547.7
126	180.00	.10000+00	1303.0	.1418	.1863	.2009	.9384	.1116-01	.7880-02	1.165	8.593	557.8
125	225.00	.98000	1425.0	.4880-01	.6740-01	.7120-01	.9429	.3955-02	.2708-02	.3460	2.527	578.0
125	225.00	.99400	1426.0	.3990-01	.5450-01	.5750-01	.9429	.3192-02	.2215-02	.2920	2.134	574.0
125	263.00	.13600	1336.0	.8620-01	.1100	.1200	.9349	.6665-02	.4787-02	.7810	5.803	542.6
126	263.00	.20000	1472.0	.7080-01	.8860-01	.9590-01	.9349	.5326-02	.3931-02	.6900	5.158	530.2
126	263.00	.30000	1337.0	.7530-01	.9400-01	.1017	.9349	.5648-02	.4184-02	.7420	5.647	528.3
126	263.00	.40000	1473.0	.4870-01	.6140-01	.6660-01	.9349	.3699-02	.2706-02	.4630	3.458	534.4
126	263.00	.50000	1474.0	.4200-01	.5280-01	.5730-01	.9349	.3184-02	.2331-02	.4000	2.986	534.0
126	263.00	.60000	1475.0	.3020-01	.3770-01	.4080-01	.9349	.2269-02	.1676-02	.2950	2.204	529.8
126	263.00	.75000	1338.0	.3700-01	.4700-01	.5110-01	.9349	.2840-02	.2058-02	.3440	2.558	538.7
126	263.00	.81500	1339.0	.2560-01	.3210-01	.3470-01	.9349	.1929-02	.1420-02	.2480	1.850	531.3
126	263.00	.83700	1340.0	.2690-01	.3370-01	.3650-01	.9349	.2029-02	.1496-02	.2620	1.957	530.7
126	263.00	.88400	1341.0	.4070-01	.5200-01	.5670-01	.9349	.3152-02	.2262-02	.3680	2.733	543.0
126	263.00	.89400	1342.0	.5980-01	.7550-01	.8200-01	.9349	.4554-02	.3324-02	.5660	4.219	535.5
126	263.00	.92800	1477.0	.4800-01	.6160-01	.6740-01	.9349	.3746-02	.2664-02	.4240	3.145	546.4
125	263.00	.93900	1344.0	.5350-01	.7040-01	.7790-01	.9349	.4325-02	.2969-02	.4350	3.207	559.2
126	270.00	.80000-02	1304.0	.2515	.3287	.3336	.9476	.1853-01	.1397-01	2.100	16.61	555.3
126	270.00	.50000-01	1306.0	.2679	.3556	.3612	.9476	.2007-01	.1488-01	2.130	14.92	562.5
125	270.00	.75000-01	1307.0	.1899	.2467	.2503	.9476	.1390-01	.1054-01	1.615	11.37	552.6
126	270.00	.10000+00	1308.0	.2122	.2824	.2868	.9476	.1594-01	.1179-01	1.672	12.30	563.7
125	270.00	.11500	1345.0	.1534	.2067	.2306	.9350	.1281-01	.8519-02	1.167	8.556	568.8
125	277.00	.13600	1346.0	.7370-01	.9340-01	.1015	.9352	.5638-02	.4091-02	.6820	5.081	539.0
125	277.00	.30000	1347.0	.6930-01	.8680-01	.9390-01	.9352	.5213-02	.3850-02	.6740	5.121	530.8
126	277.00	.40000	1464.0	.6060-01	.7670-01	.8320-01	.9352	.4623-02	.3365-02	.5650	4.213	537.5
126	277.00	.60000	1466.0	.6830-01	.8660-01	.9420-01	.9352	.5231-02	.3792-02	.6300	4.693	539.3
126	277.00	.70000	1467.0	.6750-01	.8550-01	.9280-01	.9352	.5156-02	.3751-02	.6300	4.691	537.8
125	277.00	.75000	1348.0	.6170-01	.8030-01	.8810-01	.9352	.4893-02	.3428-02	.5240	3.875	552.9
125	277.00	.81500	1349.0	.7130-01	.9120-01	.9940-01	.9352	.5519-02	.3959-02	.6410	4.758	543.9
125	277.00	.83700	1350.0	.8150-01	.1045	.1140	.9352	.6333-02	.4524-02	.7250	5.377	545.6
125	277.00	.88400	1351.0	.9990-01	.1320	.1458	.9352	.8099-02	.5548-02	.8060	5.935	560.5
125	277.00	.89400	1352.0	.1032	.1330	.1454	.9352	.8074-02	.5733-02	.9050	6.708	547.9
126	277.00	.90000	1468.0	.8920-01	.1157	.1268	.9352	.7047-02	.4953-02	.7630	5.641	551.7
126	277.00	.90700	1353.0	.7750-01	.1017	.1122	.9352	.6231-02	.4306-02	.6380	4.704	557.5
126	277.00	.92100	1469.0	.8440-01	.1083	.1182	.9352	.6568-02	.4686-02	.7480	5.552	545.9
126	277.00	.92800	1470.0	.7450-01	.9750-01	.1073	.9352	.5961-02	.4141-02	.6200	4.579	555.8

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
126	277.00	.93700	1471.0	.9610-01	.1271	.1406	.9352	.7812-02	.5337-02	.7710	5.673	561.2
125	277.00	.93900	1354.0	.9920-01	.1347	.1507	.9352	.8371-02	.5508-02	.7370	5.395	572.0
126	335.00	.11000	1309.0	.2577	.3472	.3479	.9497	.1933-01	.1432-01	1.960	14.38	568.7
125	337.50	.74000	1355.0	.1625	.2225	.2494	.9354	.1385-01	.9022-02	1.180	8.624	575.0
126	337.50	.75000	1356.0	.1672	.2392	.2735	.9354	.1519-01	.9286-02	1.089	8.044	588.5
126	337.50	.76500	1357.0	.1093	.1409	.1539	.9354	.8549-02	.6071-02	.9540	7.189	548.5
126	337.50	.92500	1359.0	.1183	.1573	.1741	.9354	.9670-02	.6570-02	.9340	6.868	563.5
126	337.50	.93200	1360.0	.1461	.1980	.2208	.9354	.1227-01	.8116-02	1.092	8.004	571.0
126	337.50	.93900	1361.0	.2235	.3109	.3509	.9354	.1950-01	.1242-01	1.558	11.36	580.1

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR04)

RIGHT SRB

PARAMETRIC DATA

ALPHA = .0000 BETA = -5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
115	.0000	-5.000	3.010	37.30	704.0	250.3	.9990	6.336	2333.	.3349-03	.2002-06	3.903
116	.0000	-5.000	3.010	37.30	704.0	250.5	1.000	6.340	2334.	.3349-03	.2004-06	3.901

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
115	.5554-01	.9179-02
116	.5556-01	.9182-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
116	.00000	.80000-02	1310.0	.2584	.3620	.3857	.9423	.2143-01	.1436-01	1.768	13.47	581.3
115	.00000	.25000-01	1311.0	.2428	.3447	.3684	.9423	.2046-01	.1348-01	1.604	11.48	584.7
115	.00000	.83700	1364.0	.4330-01	.5530-01	.6040-01	.9345	.3355-02	.2406-02	.3920	2.915	540.8
115	.00000	.88400	1365.0	.1050	.1358	.1494	.9345	.8297-02	.5829-02	.9040	6.695	548.7
115	.00000	.90700	1366.0	.8790-01	.1137	.1251	.9345	.6947-02	.4884-02	.7580	5.616	548.5
115	5.0000	.75000-01	1313.0	.1398	.1874	.1971	.9427	.1095-01	.7763-02	1.076	7.648	565.2
115	20.000	.10000+00	1318.0	.1358	.1857	.1942	.9440	.1079-01	.7542-02	.9880	7.234	572.7
115	20.000	.11000	1319.0	.1645	.2243	.2346	.9440	.1303-01	.9133-02	1.205	8.824	571.8
115	20.000	.95300	1432.0	.7960-01	.1019	.1051	.9447	.5835-02	.4419-02	.7090	5.268	543.3
116	22.500	.72400	1367.0	.1333	.1796	.2012	.9346	.1118-01	.7404-02	1.010	7.538	567.9
115	22.500	.74000	1368.0	.2211	.3126	.3583	.9346	.1990-01	.1228-01	1.478	10.76	583.4
115	22.500	.75000	1369.0	.3061	.4770	.5764	.9346	.3201-01	.1700-01	1.669	12.02	605.6
116	22.500	.76500	1370.0	.1540	.2016	.2228	.9346	.1238-01	.8558-02	1.277	9.594	555.1
116	22.500	.77100	1371.0	.9640-01	.1219	.1326	.9346	.7370-02	.5358-02	.9050	6.749	535.5
115	22.500	.92500	1372.0	.6130-01	.7850-01	.8590-01	.9346	.4772-02	.3405-02	.5480	4.068	543.0
115	22.500	.93900	1374.0	.9240-01	.1196	.1316	.9346	.7308-02	.5131-02	.7930	5.876	549.1
115	24.400	.95300	1433.0	.9800-01	.1261	.1298	.9450	.7211-02	.5441-02	.8580	6.365	546.1
115	35.000	.75000-01	1321.0	.1557	.2125	.2202	.9452	.1223-01	.8649-02	1.139	8.075	572.0
115	35.000	.11000	1322.0	.1609	.2192	.2272	.9452	.1262-01	.8936-02	1.182	8.804	571.5
115	35.600	.95300	1434.0	.8630-01	.1106	.1132	.9460	.6287-02	.4791-02	.7660	5.688	543.9

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR04)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
115	40.000	.95300	1435.0	.7530-01	.9640-01	.9840-01	.9463	.5467-02	.4180-02	.6710	4.984	543.2
115	45.000	.74000	1375.0	.2292	.3267	.3754	.9347	.2085-01	.1273-01	1.502	11.11	585.8
115	45.000	.75000	1376.0	.2812	.4333	.5190	.9347	.2882-01	.1562-01	1.566	11.48	603.5
116	45.000	.76500	1377.0	.1876	.2547	.2858	.9347	.1588-01	.1042-01	1.395	10.22	570.6
116	45.000	.77100	1378.0	.1205	.1594	.1769	.9347	.9829-02	.6694-02	.9650	7.108	560.2
116	45.000	.81500	1379.0	.3040-01	.3930-01	.4320-01	.9347	.2402-02	.1688-02	.2610	1.933	549.8
116	45.000	.88400	1381.0	.8090-01	.1036	.1134	.9347	.6300-02	.4494-02	.7210	5.353	544.0
116	45.000	.90700	1382.0	.5770-01	.7310-01	.7960-01	.9347	.4425-02	.3206-02	.5350	3.984	537.6
115	65.000	.11000	1323.0	.2065	.2847	.2912	.9470	.1617-01	.1147-01	1.470	10.57	575.6
115	67.500	.74000	1383.0	.2056	.2944	.3384	.9349	.1880-01	.1142-01	1.332	9.848	587.1
115	67.500	.75000	1384.0	.2935	.4601	.5551	.9349	.3083-01	.1630-01	1.584	11.59	606.6
116	67.500	.77100	1385.0	.1778	.2434	.2739	.9349	.1522-01	.9879-02	1.290	9.440	573.8
115	76.000	.10000+00	1324.0	.2017	.2745	.2797	.9474	.1563-01	.1120-01	1.486	10.89	571.1
115	76.000	.14100	1386.0	.1496	.2057	.2319	.9350	.1288-01	.8308-02	1.072	7.836	574.8
115	76.000	.14800	1387.0	.1076	.1396	.1533	.9350	.8515-02	.5978-02	.9180	6.798	550.1
115	76.000	.15500	1388.0	.7900-01	.1002	.1090	.9350	.6056-02	.4385-02	.7270	5.419	537.9
115	76.000	.16200	1389.0	.6190-01	.7810-01	.8480-01	.9350	.4708-02	.3435-02	.5810	4.339	534.5
115	76.000	.25000	1390.0	.1600-01	.2010-01	.2180-01	.9350	.1212-02	.8904-03	.1540	1.167	531.3
115	77.500	.95300	1436.0	.5430-01	.6900-01	.6970-01	.9483	.3870-02	.3018-02	.4990	3.718	538.3
115	77.500	.99400	1439.0	.6010-01	.7970-01	.8060-01	.9483	.4478-02	.3337-02	.4770	3.513	560.8
116	90.000	.15000-01	1325.0	.2763	.3840	.3913	.9476	.2174-01	.1535-01	1.927	14.30	578.8
115	90.000	.25000-01	1326.0	.2915	.4288	.4387	.9476	.2437-01	.1619-01	1.779	12.67	593.9
116	90.000	.40000-01	1327.0	.2421	.3349	.3412	.9476	.1896-01	.1345-01	1.710	12.49	577.3
115	90.000	.60000-01	1328.0	.1917	.2574	.2617	.9476	.1454-01	.1065-01	1.468	10.11	565.9
115	90.000	.75000-01	1329.0	.1077	.1406	.1427	.9476	.7924-02	.5979-02	.8980	6.125	553.6
116	90.000	.13230	1479.0	.2947	1.169	10.64	.9350	.5914	.1638-01	.7710	5.416	657.3
116	90.000	.13390	1480.0	.2324	.8654	4.725	.9350	.2625	.1291-01	.6220	4.370	656.2
116	90.000	.13560	1481.0	.2660	.5187	.7254	.9350	.4030-01	.1478-01	1.068	7.595	632.1
116	90.000	.13730	1482.0	.2264	.3370	.3949	.9350	.2194-01	.1258-01	1.350	9.763	597.1
116	90.000	.13890	1483.0	.1730	.2304	.2558	.9350	.1421-01	.9610-02	1.358	9.991	563.0
116	90.000	.55000	1391.0	.9860-01	.1259	.1374	.9350	.7634-02	.5477-02	.8870	6.594	542.4
115	90.000	.65000	1392.0	.7660-01	.9870-01	.1080	.9350	.6003-02	.4258-02	.6710	4.974	546.9
115	90.000	.74000	1393.0	.2500-01	.3240-01	.3550-01	.9350	.1970-02	.1391-02	.2160	1.631	548.1
115	90.000	.76500	1394.0	.1456	.1952	.2174	.9350	.1207-01	.8083-02	1.119	8.218	565.4
115	90.000	.77100	1395.0	.1046	.1390	.1541	.9350	.8560-02	.5811-02	.8280	6.095	561.3
115	90.000	.81500	1396.0	.4830-01	.6360-01	.7020-01	.9350	.3900-02	.2680-02	.3920	2.941	557.5
115	90.000	.83700	1397.0	.5280-01	.6860-01	.7540-01	.9350	.4186-02	.2933-02	.4480	3.319	550.9
115	90.000	.88400	1398.0	.5370-01	.6850-01	.7470-01	.9350	.4151-02	.2982-02	.4840	3.601	541.3
115	90.000	.89400	1399.0	.6150-01	.7680-01	.8300-01	.9350	.4607-02	.3414-02	.6030	4.519	527.1
115	90.000	.90700	1400.0	.4240-01	.5390-01	.5870-01	.9350	.3257-02	.2357-02	.3900	2.903	538.3
115	90.000	.91700	1401.0	.4360-01	.5520-01	.5990-01	.9350	.3328-02	.2420-02	.4060	3.025	536.1
115	90.000	.93200	1402.0	.4530-01	.5780-01	.6290-01	.9350	.3496-02	.2518-02	.4120	3.065	540.2
115	90.000	.93900	1403.0	.5090-01	.6490-01	.7080-01	.9350	.3931-02	.2827-02	.4600	3.422	541.0

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR04)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
116	95.000	.13560	1484.0	.2483	.4766	.6582	.9350	.3657-01	.1380-01	1.015	7.217	630.8
116	95.000	.13730	1485.0	.2362	.3674	.4409	.9350	.2450-01	.1312-01	1.294	9.319	605.8
116	95.000	.13890	1486.0	.1746	.2517	.2902	.9350	.1612-01	.9701-02	1.115	8.096	589.4
116	95.000	.14560	1487.0	.1357	.1785	.1972	.9350	.1096-01	.7540-02	1.107	8.165	557.5
116	95.000	.14730	1488.0	.9840-01	.1260	.1375	.9350	.7640-02	.5469-02	.8810	6.546	543.3
115	104.00	.10000+00	1330.0	.2037	.2769	.2822	.9474	.1567-01	.1131-01	1.505	11.02	570.7
115	104.00	.12000	1404.0	.2435	.4454	.5931	.9350	.3294-01	.1352-01	1.050	7.487	626.1
115	104.00	.12700	1405.0	.2404	.4056	.5111	.9350	.2838-01	.1335-01	1.154	8.263	617.3
115	104.00	.13400	1406.0	.2353	.3972	.5007	.9350	.2781-01	.1307-01	1.128	8.075	617.4
115	104.00	.14800	1408.0	.9830-01	.1272	.1396	.9350	.7751-02	.5462-02	.8460	6.269	548.8
115	104.00	.15500	1409.0	.1030	.1325	.1449	.9350	.8049-02	.5718-02	.9040	6.705	545.7
115	104.00	.16200	1410.0	.8280-01	.1058	.1155	.9350	.6413-02	.4599-02	.7440	5.530	542.0
115	104.00	.17300	1411.0	.5790-01	.7290-01	.7910-01	.9350	.4394-02	.3216-02	.5490	4.102	533.0
115	104.00	.18000	1412.0	.4750-01	.5960-01	.6460-01	.9350	.3585-02	.2641-02	.4590	3.429	530.1
115	104.00	.18600	1413.0	.4220-01	.5290-01	.5720-01	.9350	.3176-02	.2344-02	.4100	3.066	529.0
115	104.00	.19300	1414.0	.3950-01	.4970-01	.5380-01	.9350	.2988-02	.2194-02	.3770	2.820	531.7
115	104.00	.20000	1415.0	.3990-01	.5040-01	.5470-01	.9350	.3037-02	.2216-02	.3750	2.801	534.4
115	104.00	.25000	1416.0	.4280-01	.5420-01	.5890-01	.9350	.3274-02	.2379-02	.3980	3.020	536.3
116	112.00	.13560	1489.0	.1534	.2096	.2357	.9349	.1310-01	.8522-02	1.119	8.187	573.1
116	112.00	.13730	1490.0	.1539	.2154	.2449	.9349	.1361-01	.8549-02	1.054	7.684	581.1
116	112.00	.13890	1491.0	.1587	.2267	.2602	.9349	.1446-01	.8819-02	1.036	7.534	586.9
116	112.00	.14560	1492.0	.1675	.2224	.2468	.9349	.1371-01	.9308-02	1.328	9.777	561.7
116	112.00	.14730	1493.0	.1295	.1730	.1924	.9349	.1069-01	.7197-02	1.010	7.422	564.1
115	112.50	.74000	1417.0	.1703	.2420	.2772	.9349	.1540-01	.9455-02	1.122	8.164	585.1
115	112.50	.75000	1418.0	.1864	.2801	.3302	.9349	.1834-01	.1035-01	1.088	7.866	598.6
116	112.50	.77100	1419.0	.9870-01	.1321	.1471	.9349	.8175-02	.5485-02	.7640	5.711	565.1
115	112.50	.92500	1420.0	.4700-01	.5990-01	.6530-01	.9349	.3628-02	.2611-02	.4270	3.175	540.3
115	112.50	.93200	1421.0	.4400-01	.5650-01	.6170-01	.9349	.3429-02	.2444-02	.3900	2.892	544.3
115	112.50	.93900	1422.0	.4430-01	.5690-01	.6220-01	.9349	.3457-02	.2459-02	.3900	2.895	545.1
115	112.50	.95300	1440.0	.5620-01	.7230-01	.7320-01	.9479	.4065-02	.3122-02	.4930	3.660	545.8
116	112.50	.96700	1441.0	.6270-01	.8020-01	.8110-01	.9479	.4507-02	.3481-02	.5610	4.169	543.2
116	112.50	.99400	1443.0	.5030-01	.6650-01	.6740-01	.9479	.3745-02	.2793-02	.4030	2.971	560.0
116	135.00	.80000-02	1331.0	.6000-03	.8000-03	.8000-03	.9459	.4334-04	.3384-04	.6000-02	.4600-01	530.5
115	135.00	.25000-01	1332.0	.2574	.3715	.3855	.9459	.2141-01	.1429-01	1.637	11.89	589.2
116	135.00	.50000-01	1333.0	.2129	.2883	.2969	.9459	.1650-01	.1183-01	1.592	11.67	569.8
115	135.00	.75000-01	1334.0	.1127	.1477	.1515	.9459	.8416-02	.6257-02	.9290	6.974	555.3
115	135.00	.10000+00	1335.0	.1315	.1745	.1794	.9459	.9961-02	.7301-02	1.041	7.665	561.1
115	135.00	.40000	1423.0	.9490-01	.1243	.1373	.9347	.7623-02	.5272-02	.7850	5.896	554.8
116	135.00	.92500	1424.0	.3230-01	.4310-01	.4800-01	.9347	.2666-02	.1797-02	.2530	1.863	563.4
116	140.00	.13560	1494.0	.1050	.1372	.1513	.9347	.8408-02	.5836-02	.8780	6.484	554.0
116	140.00	.13730	1495.0	.1020	.1332	.1470	.9347	.8167-02	.5665-02	.8500	6.283	554.2
116	140.00	.13890	1496.0	.9810-01	.1276	.1406	.9347	.7811-02	.5452-02	.8300	6.141	552.1
116	140.00	.14560	1497.0	.1051	.1358	.1491	.9347	.8281-02	.5841-02	.9120	6.756	548.3

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
116	150.00	.14230	1499.0	.9140-01	.1174	.1287	.9346	.7152-02	.5076-02	.8050	5.977	545.7
116	180.00	.80000-02	1298.0	.2878	.4210	.4532	.9423	.2518-01	.1599-01	1.780	13.58	593.0
116	180.00	.15000-01	1299.0	.2327	.3118	.3289	.9423	.1827-01	.1293-01	1.796	12.98	565.5
115	180.00	.25000-01	1300.0	.3036	.4141	.4385	.9423	.2435-01	.1686-01	2.224	15.51	571.8
116	180.00	.50000-01	1301.0	.2022	.2696	.2842	.9423	.1579-01	.1123-01	1.581	11.07	563.7
115	180.00	.75000-01	1302.0	.1261	.1655	.1738	.9423	.9652-02	.7003-02	1.036	7.167	555.9
116	180.00	.10000+00	1303.0	.1455	.1952	.2060	.9423	.1145-01	.8085-02	1.118	8.214	566.0
115	225.00	.98000	1425.0	.1587	.2251	.2458	.9400	.1365-01	.8811-02	1.050	7.643	584.5
115	225.00	.99400	1426.0	.1426	.1992	.2164	.9400	.1202-01	.7918-02	.9810	7.152	579.9
115	263.00	.13600	1336.0	.4620-01	.5800-01	.6310-01	.9345	.3503-02	.2563-02	.4400	3.290	532.0
116	263.00	.20000	1472.0	.4470-01	.5550-01	.6000-01	.9345	.3334-02	.2483-02	.4490	3.366	523.7
116	263.00	.30000	1337.0	.5040-01	.6260-01	.6760-01	.9345	.3756-02	.2801-02	.5080	3.880	522.9
116	263.00	.40000	1473.0	.4360-01	.5530-01	.6030-01	.9345	.3351-02	.2421-02	.4030	2.999	538.1
116	263.00	.50000	1474.0	.4730-01	.5990-01	.6540-01	.9345	.3633-02	.2627-02	.4380	3.261	537.8
116	263.00	.60000	1475.0	.6120-01	.7710-01	.8380-01	.9345	.4658-02	.3402-02	.5820	4.347	533.3
116	263.00	.75000	1338.0	.9180-01	.1182	.1297	.9345	.7207-02	.5100-02	.8050	5.968	546.6
116	263.00	.81500	1339.0	.6920-01	.8650-01	.9380-01	.9345	.5212-02	.3847-02	.6780	5.073	528.2
116	263.00	.83700	1340.0	.6500-01	.8130-01	.8810-01	.9345	.4896-02	.3611-02	.6350	4.752	528.6
116	263.00	.88400	1341.0	.9600-01	.1229	.1345	.9345	.7475-02	.5331-02	.8570	6.369	543.5
116	263.00	.89400	1342.0	.8060-01	.1015	.1104	.9345	.6134-02	.4479-02	.7660	5.719	533.4
115	263.00	.92800	1477.0	.9860-01	.1262	.1382	.9345	.7679-02	.5480-02	.8830	6.557	543.3
116	263.00	.93900	1344.0	.1119	.1455	.1604	.9345	.8907-02	.6212-02	.9460	7.003	551.4
116	270.00	.80000-02	1304.0	.1968	.2608	.2819	.9385	.1566-01	.1093-01	1.570	12.39	560.8
116	270.00	.50000-01	1306.0	.1042	.1383	.1496	.9385	.8311-02	.5787-02	.8250	5.786	561.7
115	270.00	.75000-01	1307.0	.1154	.1503	.1616	.9385	.8976-02	.6409-02	.9700	6.831	552.4
116	270.00	.10000+00	1308.0	.1232	.1623	.1751	.9385	.9730-02	.6844-02	.9990	7.369	558.3
115	270.00	.11500	1345.0	.1005	.1332	.1481	.9345	.8224-02	.5580-02	.8000	5.893	560.4
115	277.00	.13600	1346.0	.4290-01	.5390-01	.5860-01	.9345	.3252-02	.2383-02	.4110	3.074	531.2
115	277.00	.30000	1347.0	.5140-01	.6370-01	.6880-01	.9345	.3820-02	.2857-02	.5220	3.991	520.9
116	277.00	.40000	1464.0	.4370-01	.5510-01	.6000-01	.9345	.3331-02	.2429-02	.4130	3.086	534.1
116	277.00	.60000	1466.0	.5500-01	.6930-01	.7530-01	.9345	.4184-02	.3055-02	.5220	3.899	533.4
116	277.00	.70000	1467.0	.5030-01	.6360-01	.6930-01	.9345	.3849-02	.2792-02	.4690	3.500	536.3
115	277.00	.75000	1348.0	.7870-01	.1016	.1117	.9345	.6201-02	.4369-02	.6820	5.054	547.7
115	277.00	.81500	1349.0	.9020-01	.1143	.1247	.9345	.6923-02	.5007-02	.8340	6.214	537.2
115	277.00	.83700	1350.0	.7550-01	.9550-01	.1040	.9345	.5778-02	.4191-02	.7030	5.243	535.9
115	277.00	.88400	1351.0	.9210-01	.1181	.1294	.9345	.7186-02	.5115-02	.8180	6.077	543.8
115	277.00	.89400	1352.0	.7330-01	.9260-01	.1008	.9345	.5597-02	.4068-02	.6870	5.122	535.0
116	277.00	.90000	1468.0	.7400-01	.9390-01	.1025	.9345	.5695-02	.4112-02	.6830	5.085	538.3
116	277.00	.90700	1353.0	.8120-01	.1036	.1132	.9345	.6289-02	.4513-02	.7370	5.485	541.0
116	277.00	.92100	1469.0	.6540-01	.8250-01	.8990-01	.9345	.4993-02	.3633-02	.6150	4.590	535.0
116	277.00	.93700	1471.0	.9420-01	.1209	.1325	.9345	.7359-02	.5235-02	.8370	6.214	544.5
115	277.00	.93900	1354.0	.6990-01	.1038	.1222	.9345	.6786-02	.3883-02	.4180	3.028	596.0
116	335.00	.11000	1309.0	.1598	.2151	.2301	.9405	.1279-01	8878-02	1.217	8.929	567.3

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR04)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
115	337.50	.74000	1355.0	.1724	.2356	.2659	.9345	.1476-01	.9575-02	1.256	9.191	572.6
115	337.50	.75000	1356.0	.2102	.2961	.3390	.9345	.1882-01	.1168-01	1.417	10.50	582.4
116	337.50	.76500	1357.0	.1183	.1501	.1638	.9345	.9098-02	.6572-02	1.092	8.272	538.2
116	337.50	.92500	1359.0	.7060-01	.9050-01	.9910-01	.9345	.5509-02	.3924-02	.6290	4.672	544.0
116	337.50	.93200	1360.0	.7920-01	.1019	.1119	.9345	.6216-02	.4402-02	.6960	5.164	546.2
116	337.50	.93900	1361.0	.8480-01	.1092	.1199	.9345	.6664-02	.4710-02	.7410	5.495	547.0

RIGHT SRB

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
111	-.4000-01	.0000	3.010	37.10	702.0	249.6	.9950	6.311	2330.	.3345-03	.1997-06	3.903
112	-.8000-01	.0000	3.010	37.30	702.0	249.7	.9990	6.337	2331.	.3357-03	.1998-06	3.916

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
111	.5540-01	.9182-02
112	.5552-01	.9166-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
112	.00000	.80000-02	1310.0	.3193	.4197	.4405	.9425	.2446-01	.1773-01	2.603	20.09	555.4
111	.00000	.25000-01	1311.0	.2914	.3930	.4149	.9424	.2299-01	.1614-01	2.190	15.82	566.1
111	.00000	.83700	1364.0	.1192	.1573	.1746	.9345	.9673-02	.6606-02	.9580	7.068	556.8
111	.00000	.88400	1365.0	.1815	.2485	.2807	.9345	.1555-01	.1005-01	1.307	9.571	571.8
111	.00000	.90700	1366.0	.1354	.1845	.2079	.9345	.1152-01	.7499-02	.9880	7.243	570.0
111	5.0000	.75000-01	1313.0	.1812	.2351	.2461	.9424	.1364-01	.1004-01	1.536	11.01	548.7
111	15.600	.95300	1431.0	.1600	.2168	.2280	.9431	.1263-01	.8866-02	1.189	8.722	567.7
111	20.000	.75000-01	1316.0	.1799	.2341	.2453	.9424	.1359-01	.9969-02	1.512	10.83	550.1
111	20.000	.10000+00	1318.0	.1861	.2426	.2543	.9424	.1409-01	.1031-01	1.553	11.49	551.1
111	20.000	.11000	1319.0	.1874	.2430	.2544	.9424	.1410-01	.1038-01	1.591	11.79	548.5
111	20.000	.95300	1432.0	.1236	.1648	.1728	.9431	.9573-02	.6846-02	.9610	7.070	561.5
112	22.500	.72400	1367.0	.1589	.2127	.2377	.9345	.1320-01	.8824-02	1.225	9.162	563.4
111	22.500	.74000	1368.0	.2647	.3675	.4178	.9345	.2315-01	.1467-01	1.840	13.45	576.3
111	22.500	.75000	1369.0	.4623	.7198	.8699	.9345	.4819-01	.2561-01	2.513	18.12	603.7
112	22.500	.76500	1370.0	.1975	.2605	.2891	.9345	.1605-01	.1096-01	1.591	11.94	557.1
112	22.500	.77100	1371.0	.9930-01	.1265	.1383	.9345	.7678-02	.5511-02	.8980	6.685	539.3
111	22.500	.92500	1372.0	.6970-01	.8950-01	.9810-01	.9345	.5437-02	.3860-02	.6110	4.542	543.4
111	22.500	.93900	1374.0	.1030	.1346	.1488	.9345	.8242-02	.5706-02	.8530	6.304	552.4
111	24.400	.95300	1433.0	.1381	.1856	.1949	.9431	.1080-01	.7650-02	1.048	7.702	564.8
111	35.000	.75000-01	1321.0	.2138	.2797	.2934	.9424	.1625-01	.1184-01	1.764	12.62	552.9

IH72. OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR05)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
111	35.000	.11000	1322.0	.1680	.2178	.2281	.9424	.1263-01	.9308-02	1.429	10.76	548.3
111	35.600	.95300	1434.0	.1076	.1415	.1480	.9431	.8198-02	.5960-02	.8720	6.441	555.4
111	40.000	.95300	1435.0	.9060-01	.1182	.1234	.9431	.6835-02	.5020-02	.7560	5.590	551.3
111	45.000	.74000	1375.0	.2834	.3957	.4510	.9345	.2499-01	.1570-01	1.942	14.42	578.1
111	45.000	.75000	1376.0	.4279	.6377	.7521	.9345	.4166-01	.2371-01	2.528	18.61	595.1
112	45.000	.76500	1377.0	.1769	.2344	.2607	.9345	.1448-01	.9823-02	1.406	10.36	559.2
112	45.000	.77100	1378.0	.1200	.1555	.1713	.9345	.9510-02	.6660-02	1.022	7.575	548.8
112	45.000	.81500	1379.0	.6280-01	.8040-01	.8800-01	.9345	.4888-02	.3488-02	.5600	4.164	541.7
112	45.000	.88400	1381.0	.8390-01	.1068	.1167	.9345	.6478-02	.4657-02	.7620	5.675	538.6
112	45.000	.90700	1382.0	.8740-01	.1102	.1199	.9345	.6656-02	.4851-02	.8230	6.148	532.6
111	65.000	.11000	1323.0	.2615	.3505	.3696	.9424	.2047-01	.1449-01	2.003	14.49	563.5
111	67.500	.74000	1383.0	.2578	.3592	.4092	.9345	.2267-01	.1428-01	1.774	13.17	577.6
111	67.500	.75000	1384.0	.3539	.5190	.6067	.9345	.3361-01	.1960-01	2.162	15.95	591.5
112	67.500	.77100	1385.0	.2257	.2985	.3317	.9345	.1842-01	.1253-01	1.804	13.30	558.3
111	76.000	.10000+00	1324.0	.2468	.3334	.3522	.9424	.1951-01	.1367-01	1.847	13.56	566.7
111	76.000	.14100	1386.0	.1853	.2460	.2739	.9345	.1517-01	.1026-01	1.458	10.74	559.7
111	76.000	.14800	1387.0	.1224	.1550	.1689	.9345	.9355-02	.6784-02	1.134	8.465	534.6
111	76.000	.15500	1388.0	.8350-01	.1043	.1130	.9345	.6260-02	.4627-02	.8150	6.112	525.6
111	76.000	.16200	1389.0	.6660-01	.8290-01	.8970-01	.9345	.4970-02	.3692-02	.6600	4.955	523.0
111	76.000	.25000	1390.0	.1740-01	.2130-01	.2300-01	.9345	.1272-02	.9613-03	.1810	1.387	513.6
111	77.500	.95300	1436.0	.5570-01	.7170-01	.7460-01	.9430	.4135-02	.3084-02	.4850	3.599	544.6
111	77.500	.99400	1439.0	.7390-01	.9710-01	.1015	.9430	.5625-02	.4094-02	.6010	4.442	554.9
112	90.000	.15000-01	1325.0	.2931	.3874	.4074	.9424	.2262-01	.1627-01	2.346	17.59	558.1
111	90.000	.25000-01	1326.0	.3374	.4731	.5039	.9424	.2792-01	.1869-01	2.287	16.41	579.5
112	90.000	.40000-01	1327.0	.2841	.3759	.3953	.9424	.2195-01	.1578-01	2.269	16.73	558.4
111	90.000	.60000-01	1328.0	.2184	.2867	.3010	.9424	.1667-01	.1210-01	1.783	12.35	554.4
111	90.000	.75000-01	1329.0	.1189	.1532	.1602	.9424	.8878-02	.6586-02	1.032	7.067	545.2
112	90.000	.13230	1479.0	.4151	1.054	2.018	.9345	.1121	.2305-01	1.335	9.434	644.4
112	90.000	.13390	1480.0	.4256	1.169	2.551	.9345	.1416	.2363-01	1.305	9.208	647.1
112	90.000	.13560	1481.0	.3653	.6776	.9220	.9345	.5119-01	.2028-01	1.545	11.02	626.1
112	90.000	.13730	1482.0	.2443	.3644	.4300	.9345	.2387-01	.1356-01	1.445	10.46	595.7
112	90.000	.13890	1483.0	.1362	.1822	.2036	.9345	.1130-01	.7562-02	1.051	7.731	563.3
112	90.000	.55000	1391.0	.8710-01	.1112	.1217	.9345	.6756-02	.4838-02	.7840	5.831	540.3
112	90.000	.65000	1392.0	.8160-01	.1050	.1153	.9345	.6402-02	.4532-02	.7140	5.300	544.8
111	90.000	.74000	1393.0	.4470-01	.5800-01	.6400-01	.9345	.3543-02	.2478-02	.3790	2.852	549.0
111	90.000	.76500	1394.0	.1951	.2571	.2853	.9345	.1580-01	.1081-01	1.572	11.60	556.4
111	90.000	.77100	1395.0	.1575	.2075	.2302	.9345	.1275-01	.8727-02	1.271	9.382	556.1
111	90.000	.81500	1396.0	.3920-01	.5130-01	.5670-01	.9345	.3143-02	.2170-02	.3220	2.423	553.2
111	90.000	.83700	1397.0	.6030-01	.7820-01	.8610-01	.9345	.4771-02	.3341-02	.5120	3.797	548.4
111	90.000	.88400	1398.0	.5700-01	.7340-01	.8060-01	.9345	.4465-02	.3159-02	.4960	3.686	544.6
111	90.000	.89400	1399.0	.7320-01	.9150-01	.9920-01	.9345	.5498-02	.4053-02	.7090	5.312	526.8
111	90.000	.90700	1400.0	.5070-01	.6470-01	.7070-01	.9345	.3915-02	.2811-02	.4580	3.411	538.8
111	90.000	.91700	1401.0	.5050-01	.6420-01	.7010-01	.9345	.3885-02	.2800-02	.4610	3.435	537.2

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, RIGHT SRB

(RVZR05)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HI/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
111	90.000	.93200	1402.0	.5110-01	.6540-01	.7170-01	.9345	.3970-02	.2831-02	.4540	3.374	541.5
111	90.000	.93900	1403.0	.5920-01	.7600-01	.8330-01	.9345	.4614-02	.3277-02	.5200	3.863	543.1
112	95.000	.13560	1484.0	.3639	.6331	.8215	.9345	.4561-01	.2020-01	1.668	11.93	619.7
112	95.000	.13730	1485.0	.2756	.4184	.4985	.9345	.2768-01	.1530-01	1.574	11.37	599.4
112	95.000	.13890	1486.0	.1864	.2701	.3137	.9345	.1742-01	.1035-01	1.174	8.524	588.9
112	95.000	.14560	1487.0	.1401	.1839	.2036	.9345	.1131-01	.7781-02	1.148	8.481	554.7
112	95.000	.14730	1488.0	.1066	.1361	.1488	.9345	.8262-02	.5920-02	.9600	7.146	540.0
111	104.00	.10000+00	1330.0	.2406	.3322	.3527	.9424	.1954-01	.1333-01	1.696	12.40	574.5
111	104.00	.12000	1404.0	.3669	.6018	.7509	.9345	.4160-01	.2032-01	1.827	13.11	611.9
111	104.00	.12700	1405.0	.3414	.5298	.6392	.9345	.3541-01	.1891-01	1.866	13.45	603.1
111	104.00	.13400	1406.0	.3085	.4926	.6044	.9345	.3349-01	.1709-01	1.604	11.54	607.9
111	104.00	.14800	1408.0	.7660-01	.9720-01	.1060	.9345	.5874-02	.4244-02	.7030	5.244	536.1
111	104.00	.15500	1409.0	.8720-01	.1129	.1242	.9345	.6878-02	.4833-02	.7470	5.539	547.2
111	104.00	.16200	1410.0	.6840-01	.8790-01	.9650-01	.9345	.5345-02	.3787-02	.5980	4.437	544.0
111	104.00	.17300	1411.0	.5780-01	.7290-01	.7930-01	.9345	.4391-02	.3204-02	.5450	4.070	531.8
111	104.00	.18000	1412.0	.4880-01	.6120-01	.6640-01	.9345	.3680-02	.2704-02	.4690	3.511	528.3
111	104.00	.18600	1413.0	.4220-01	.5280-01	.5720-01	.9345	.3169-02	.2337-02	.4090	3.068	526.6
111	104.00	.19300	1414.0	.3990-01	.4990-01	.5420-01	.9345	.3001-02	.2209-02	.3850	2.881	527.6
111	104.00	.20000	1415.0	.4090-01	.5140-01	.5590-01	.9345	.3095-02	.2268-02	.3900	2.919	529.7
112	112.00	.13560	1489.0	.3360-01	.4230-01	.4600-01	.9345	.2547-02	.1863-02	.3190	2.427	530.5
112	112.00	.13730	1490.0	.1784	.2408	.2701	.9345	.1500-01	.9905-02	1.342	9.855	566.8
112	112.00	.13890	1491.0	.1892	.2628	.2989	.9345	.1660-01	.1050-01	1.316	9.614	577.0
112	112.00	.14560	1492.0	.1851	.2601	.2975	.9345	.1652-01	.1028-01	1.251	9.121	580.5
112	112.00	.14730	1493.0	.1775	.2334	.2587	.9345	.1436-01	.9857-02	1.445	10.67	555.7
111	112.50	.74000	1417.0	.1296	.1729	.1929	.9345	.1071-01	.7197-02	1.010	7.432	562.0
111	112.50	.75000	1418.0	.1573	.2287	.2662	.9345	.1475-01	.8713-02	.9790	7.108	589.4
112	112.50	.77100	1419.0	.1598	.2500	.3030	.9345	.1678-01	.8852-02	.8610	6.205	604.5
111	112.50	.92500	1420.0	.7240-01	.9820-01	.1104	.9345	.6131-02	.4021-02	.5380	4.009	568.6
111	112.50	.93200	1421.0	.5780-01	.7340-01	.8020-01	.9345	.4441-02	.3200-02	.5260	3.922	537.3
111	112.50	.93900	1422.0	.5620-01	.7190-01	.7870-01	.9345	.4362-02	.3113-02	.5000	3.716	541.3
111	112.50	.95300	1440.0	.5770-01	.7400-01	.8110-01	.9345	.4494-02	.3197-02	.5090	3.784	542.5
112	112.50	.96700	1441.0	.5810-01	.7470-01	.7790-01	.9430	.4314-02	.3217-02	.5060	3.760	544.4
112	112.50	.99400	1443.0	.7370-01	.9380-01	.9750-01	.9430	.5415-02	.4091-02	.6700	4.991	538.5
112	135.00	.80000-02	1331.0	.7080-01	.9330-01	.9760-01	.9430	.5420-02	.3934-02	.5740	4.239	556.3
111	135.00	.25000-01	1332.0	.4000-03	.5000-03	.5000-03	.9423	.2920-04	.2231-04	.4000-02	.3000-01	530.6
112	135.00	.50000-01	1333.0	.2987	.4234	.4522	.9424	.2505-01	.1655-01	1.972	14.36	582.6
111	135.00	.75000-01	1334.0	.2427	.3237	.3411	.9423	.1894-01	.1347-01	1.890	13.91	562.0
111	135.00	.10000+00	1335.0	.1164	.1524	.1599	.9424	.8860-02	.6449-02	.9580	7.205	553.2
111	135.00	.40000	1423.0	.1387	.1839	.1936	.9424	.1072-01	.7684-02	1.096	8.081	559.1
112	135.00	.92500	1424.0	.8950-01	.1173	.1298	.9345	.7190-02	.4958-02	.7340	5.518	553.7
112	140.00	.13560	1494.0	.5290-01	.6810-01	.7470-01	.9345	.4150-02	.2939-02	.4630	3.440	544.6
112	140.00	.13730	1495.0	.1001	.1296	.1427	.9345	.7923-02	.5556-02	.8550	6.338	548.3
				.1061	.1381	.1523	.9345	.8456-02	.5892-02	.8940	6.615	550.6

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR05)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
112	140.00	.13890	1496.0	.1043	.1357	.1497	.9345	.8313-02	.5789-02	.8770	6.489	550.8
112	140.00	.14560	1497.0	.1068	.1377	.1513	.9345	.8401-02	.5928-02	.9260	6.873	546.0
112	150.00	.14230	1499.0	.9490-01	.1219	.1337	.9345	.7423-02	.5271-02	.8370	6.214	543.6
112	180.00	.80000-02	1298.0	.3348	.4685	.4991	.9423	.2771-01	.1859-01	2.286	17.56	579.3
112	180.00	.15000-01	1299.0	.2274	.3016	.3176	.9423	.1763-01	.1263-01	1.801	13.05	559.6
111	180.00	.25000-01	1300.0	.3567	.4841	.5120	.9424	.2837-01	.1976-01	2.635	18.41	568.4
112	180.00	.50000-01	1301.0	.2381	.3161	.3328	.9423	.1848-01	.1322-01	1.883	13.21	559.9
111	180.00	.75000-01	1302.0	.1403	.1839	.1931	.9424	.1070-01	.7772-02	1.149	7.962	553.9
112	180.00	.10000+00	1303.0	.1701	.2284	.2411	.9423	.1339-01	.9443-02	1.298	9.539	564.8
111	225.00	.98000	1425.0	.7670-01	.1103	.1175	.9430	.6510-02	.4248-02	.4890	3.554	586.7
111	225.00	.99400	1426.0	.3240-01	.4570-01	.4850-01	.9430	.2688-02	.1797-02	.2170	1.579	581.2
111	263.00	.13600	1336.0	.6460-01	.8140-01	.8860-01	.9345	.4908-02	.3579-02	.6080	4.541	532.0
112	263.00	.20000	1472.0	.6540-01	.8090-01	.8730-01	.9345	.4846-02	.3633-02	.6680	5.024	518.5
112	263.00	.30000	1337.0	.7230-01	.8900-01	.9590-01	.9345	.5323-02	.4016-02	.7520	5.766	514.9
112	263.00	.40000	1473.0	.5630-01	.7080-01	.7700-01	.9345	.4276-02	.3125-02	.5340	3.990	531.4
112	263.00	.50000	1474.0	.5370-01	.6760-01	.7350-01	.9345	.4078-02	.2984-02	.5120	3.825	530.8
112	263.00	.60000	1475.0	.3900-01	.4870-01	.5270-01	.9345	.2928-02	.2164-02	.3810	2.859	526.0
112	263.00	.75000	1338.0	.6210-01	.7960-01	.8720-01	.9345	.4843-02	.3448-02	.5510	4.092	542.6
112	263.00	.81500	1339.0	.4450-01	.5570-01	.6040-01	.9345	.3352-02	.2473-02	.4340	3.248	526.9
112	263.00	.83700	1340.0	.4160-01	.5190-01	.5630-01	.9345	.3124-02	.2308-02	.4070	3.047	526.1
112	263.00	.88400	1341.0	.4690-01	.5960-01	.6510-01	.9345	.3616-02	.2606-02	.4290	3.197	537.6
112	263.00	.89400	1342.0	.8180-01	.1031	.1122	.9345	.6227-02	.4544-02	.7730	5.777	532.1
112	263.00	.92800	1477.0	.5680-01	.7310-01	.8020-01	.9345	.4454-02	.3153-02	.4960	3.685	544.8
111	263.00	.93900	1344.0	.9510-01	.1264	.1408	.9345	.7798-02	.5269-02	.7470	5.499	560.1
112	270.00	.80000-02	1304.0	.2416	.3116	.3260	.9424	.1810-01	.1341-01	2.096	16.66	546.0
112	270.00	.50000-01	1306.0	.2367	.3079	.3227	.9424	.1792-01	.1314-01	1.996	14.07	550.5
111	270.00	.75000-01	1307.0	.1542	.1993	.2086	.9424	.1155-01	.8543-02	1.325	9.358	546.7
112	270.00	.10000+00	1308.0	.1740	.2286	.2401	.9424	.1333-01	.9660-02	1.420	10.48	555.3
111	270.00	.11500	1345.0	.1348	.1791	.1994	.9345	.1104-01	.7467-02	1.060	7.806	559.9
111	277.00	.13600	1346.0	.5690-01	.7150-01	.7760-01	.9345	.4299-02	.3153-02	.5430	4.065	529.4
111	277.00	.30000	1347.0	.6120-01	.7560-01	.8150-01	.9345	.4514-02	.3389-02	.6250	4.785	517.4
112	277.00	.40000	1464.0	.4820-01	.6030-01	.6530-01	.9345	.3628-02	.2676-02	.4690	3.517	526.9
112	277.00	.60000	1466.0	.7710-01	.9650-01	.1046	.9345	.5810-02	.4283-02	.7490	5.613	527.3
112	277.00	.70000	1467.0	.6290-01	.7870-01	.8530-01	.9345	.4738-02	.3492-02	.6110	4.573	527.4
111	277.00	.75000	1348.0	.8910-01	.1150	.1264	.9345	.7003-02	.4935-02	.7680	5.700	546.1
111	277.00	.81500	1349.0	.6400-01	.8120-01	.8860-01	.9345	.4907-02	.3543-02	.5860	4.368	536.4
111	277.00	.83700	1350.0	.7400-01	.9440-01	.1032	.9345	.5715-02	.4102-02	.6680	4.975	538.9
111	277.00	.88400	1351.0	.1404	.1828	.2016	.9345	.1117-01	.7780-02	1.178	8.724	550.3
111	277.00	.89400	1352.0	.1075	.1382	.1516	.9345	.8399-02	.5954-02	.9400	6.982	543.9
112	277.00	.90000	1468.0	.1201	.1545	.1696	.9345	.9414-02	.6667-02	1.051	7.801	544.6
112	277.00	.90700	1353.0	.1369	.1770	.1947	.9345	.1081-01	.7602-02	1.178	8.734	547.3
112	277.00	.92100	1469.0	.9900-01	.1262	.1380	.9345	.7660-02	.5498-02	.8960	6.672	539.3
112	277.00	.92800	1470.0	.1055	.1367	.1504	.9345	.8353-02	.5860-02	.9030	6.694	548.1

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
112	277.00	.93700	1471.0	.1269	.1662	.1838	.9345	.1021-01	.7045-02	1.046	7.732	553.8
111	277.00	.93900	1354.0	.1516	.2034	.2274	.9345	.1260-01	.8400-02	1.159	8.519	563.9
112	335.00	.11000	1309.0	.1955	.2546	.2667	.9425	.1481-01	.1086-01	1.644	12.17	550.8
111	337.50	.74000	1355.0	.1325	.1787	.2004	.9345	.1110-01	.7339-02	.9950	7.307	566.2
111	337.50	.75000	1356.0	.8000-01	.1104	.1251	.9345	.6933-02	.4430-02	.5640	4.196	574.4
112	337.50	.76500	1357.0	.1308	.1673	.1831	.9345	.1017-01	.7265-02	1.170	8.851	541.2
112	337.50	.92500	1359.0	.8170-01	.1089	.1214	.9345	.6738-02	.4537-02	.6390	4.703	561.5
112	337.50	.93200	1360.0	.1045	.1418	.1594	.9345	.8853-02	.5804-02	.7750	5.688	568.7
112	337.50	.93900	1361.0	.1349	.1887	.2153	.9345	.1196-01	.7490-02	.9230	6.732	579.1

RIGHT SRB

PARAMETRIC DATA

ALPHA = .0000 BETA = 5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
113	.0000	4.900	3.010	37.20	703.0	250.0	.9970	6.321	2332.	.3345-03	.2000-06	3.900
114	.0000	4.900	3.010	37.30	704.0	250.2	1.001	6.346	2333.	.3355-03	.2002-06	3.910

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
113	.5546-01	.9184-02
114	.5558-01	.9171-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
114	.00000	.80000-02	1310.0	.3285	.4618	.4925	.9423	.2737-01	.1826-01	2.224	16.94	581.8
113	.00000	.25000-01	1311.0	.3213	.4701	.5061	.9423	.2807-01	.1782-01	1.978	14.11	591.9
113	.00000	.83700	1364.0	.8340-01	.1165	.1328	.9345	.7362-02	.4627-02	.5730	4.183	579.0
113	.00000	.88400	1365.0	.1965	.2963	.3516	.9345	.1950-01	.1090-01	1.138	8.224	598.5
113	.00000	.90700	1366.0	.1501	.2233	.2631	.9345	.1459-01	.8326-02	.8930	6.462	595.7
113	5.0000	.75000-01	1313.0	.1919	.2599	.2757	.9419	.1529-01	.1064-01	1.428	10.14	568.7
113	15.600	.95300	1431.0	.2291	.3414	.3715	.9417	.2060-01	.1270-01	1.357	9.816	596.1
113	20.000	.75000-01	1316.0	.1974	.2698	.2892	.9409	.1604-01	.1095-01	1.434	10.16	571.9
113	20.000	.10000+00	1318.0	.1770	.2388	.2550	.9409	.1414-01	.9814-02	1.332	9.781	567.1
113	20.000	.11000	1319.0	.1912	.2569	.2741	.9409	.1520-01	.1060-01	1.456	10.69	565.6
113	20.000	.95300	1432.0	.3199	.4674	.5075	.9414	.2815-01	.1774-01	1.975	14.32	591.6
114	22.500	.72400	1367.0	.1514	.2174	.2514	.9345	.1397-01	.8413-02	.9750	7.202	587.8
113	22.500	.74000	1368.0	.1855	.2844	.3407	.9345	.1890-01	.1029-01	1.040	7.501	601.9
113	22.500	.75000	1369.0	.1925	.3403	.4465	.9345	.2476-01	.1068-01	.8640	6.174	622.0
114	22.500	.76500	1370.0	.1965	.2792	.3211	.9345	.1785-01	.1092-01	1.297	9.600	584.8
114	22.500	.77100	1371.0	.1724	.2373	.2686	.9345	.1493-01	.9580-02	1.232	9.010	575.0
113	22.500	.92500	1372.0	.7850-01	.1032	.1143	.9345	.6337-02	.4355-02	.6410	4.734	555.7
113	22.500	.93900	1374.0	.1201	.1648	.1864	.9345	.1033-01	.6659-02	.8620	6.308	573.5
113	24.400	.95300	1433.0	.1767	.2574	.2801	.9411	.1553-01	.9797-02	1.098	7.962	590.9
113	35.000	.75000-01	1321.0	.2085	.2874	.3110	.9400	.1725-01	.1156-01	1.480	10.47	574.9

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
113	35.000	.11000	1322.0	.1792	.2402	.2578	.9400	.1430-01	.9936-02	1.374	10.27	564.6
113	35.600	.95300	1434.0	.1268	.1730	.1859	.9405	.1031-01	.7029-02	.9250	6.773	571.4
113	40.000	.95300	1435.0	.1055	.1400	.1495	.9402	.8291-02	.5853-02	.8360	6.159	560.1
113	45.000	.74000	1375.0	.1953	.3238	.4068	.9345	.2256-01	.1083-01	.9590	6.993	614.4
113	45.000	.75000	1376.0	.3695	.8192	1.316	.9345	.7297-01	.2049-01	1.312	9.453	638.9
114	45.000	.76500	1377.0	.3631	.5840	.7197	.9345	.4000-01	.2018-01	1.877	13.49	610.6
114	45.000	.77100	1378.0	.2357	.3360	.3871	.9345	.2151-01	.1310-01	1.543	11.23	585.8
114	45.000	.81500	1379.0	.9370-01	.1240	.1378	.9345	.7660-02	.5207-02	.7490	5.519	559.7
114	45.000	.88400	1381.0	.6740-01	.8740-01	.9620-01	.9345	.5349-02	.3748-02	.5770	4.274	549.6
114	45.000	.90700	1382.0	.9070-01	.1156	.1264	.9345	.7026-02	.5041-02	.8220	6.118	540.5
113	65.000	.11000	1323.0	.2713	.3833	.4224	.9388	.2342-01	.1504-01	1.809	12.96	582.7
113	67.500	.74000	1383.0	.1892	.3266	.4215	.9345	.2338-01	.1049-01	.8760	6.373	619.4
113	67.500	.75000	1384.0	.2716	.6559	1.169	.9345	.6480-01	.1506-01	.9030	6.498	642.9
114	67.500	.77100	1385.0	.2442	.3500	.4042	.9345	.2247-01	.1357-01	1.581	11.49	587.2
113	76.000	.10000+00	1324.0	.2787	.3947	.4360	.9386	.2418-01	.1545-01	1.848	13.45	583.4
113	76.000	.14100	1386.0	.1732	.2465	.2837	.9345	.1574-01	.9603-02	1.134	8.255	584.8
113	76.000	.14800	1387.0	.1328	.1756	.1951	.9345	.1082-01	.7363-02	1.062	7.825	558.7
113	76.000	.15500	1388.0	.1203	.1555	.1711	.9345	.9488-02	.6672-02	1.035	7.673	547.8
113	76.000	.16200	1389.0	.9820-01	.1264	.1388	.9345	.7698-02	.5444-02	.8560	6.353	545.7
113	76.000	.25000	1390.0	.2400-01	.3010-01	.3260-01	.9345	.1808-02	.1333-02	.2330	1.777	527.8
113	77.500	.95300	1436.0	.5460-01	.7030-01	.7500-01	.9390	.4160-02	.3029-02	.4770	3.544	545.3
114	77.500	.99400	1439.0	.8250-01	.1093	.1177	.9390	.6529-02	.4574-02	.6540	4.821	559.8
114	90.000	.15000-01	1325.0	.3141	.4350	.4772	.9385	.2652-01	.1746-01	2.210	16.41	577.0
113	90.000	.25000-01	1326.0	.3399	.5087	.5742	.9385	.3184-01	.1885-01	1.997	14.21	597.0
114	90.000	.40000-01	1327.0	.2836	.3978	.4384	.9385	.2436-01	.1576-01	1.931	14.08	581.1
113	90.000	.60000-01	1328.0	.2428	.3313	.3615	.9385	.2005-01	.1347-01	1.772	12.17	571.3
113	90.000	.75000-01	1329.0	.1328	.1753	.1891	.9385	.1049-01	.7367-02	1.070	7.282	557.7
114	90.000	.13230	1479.0	.3488	.9412	1.988	.9345	.1105	.1938-01	1.084	7.646	647.7
114	90.000	.13390	1480.0	.3163	.8441	1.749	.9345	.9721-01	.1758-01	.9890	6.979	647.4
114	90.000	.13560	1481.0	.2357	.4631	.6608	.9345	.3672-01	.1310-01	.9390	6.673	632.0
114	90.000	.13730	1482.0	.2147	.3573	.4501	.9345	.2501-01	.1193-01	1.051	7.535	615.5
114	90.000	.13890	1483.0	.2112	.3181	.3773	.9345	.2097-01	.1174-01	1.229	8.882	598.9
114	90.000	.55000	1391.0	.6570-01	.8460-01	.9290-01	.9345	.5163-02	.3651-02	.5750	4.262	546.2
114	90.000	.65000	1392.0	.6450-01	.8500-01	.9420-01	.9345	.5237-02	.3587-02	.5250	3.871	557.3
113	90.000	.74000	1393.0	.5680-01	.7420-01	.8200-01	.9345	.4549-02	.3150-02	.4720	3.546	553.2
113	90.000	.76500	1394.0	.1801	.2453	.2764	.9345	.1533-01	.9990-02	1.321	9.678	570.7
113	90.000	.77100	1395.0	.1322	.1761	.1963	.9345	.1089-01	.7334-02	1.035	7.615	561.8
113	90.000	.81500	1396.0	.3350-01	.4350-01	.4790-01	.9345	.2657-02	.1856-02	.2840	2.136	550.1
113	90.000	.83700	1397.0	.6480-01	.8430-01	.9300-01	.9345	.5158-02	.3596-02	.5470	4.046	550.9
113	90.000	.88400	1398.0	.7490-01	.9740-01	.1075	.9345	.5959-02	.4156-02	.6330	4.681	550.7
113	90.000	.89400	1399.0	.7270-01	.9160-01	.9970-01	.9345	.5528-02	.4031-02	.6850	5.119	532.9
113	90.000	.90700	1400.0	.4260-01	.5480-01	.6020-01	.9345	.3339-02	.2361-02	.3710	2.755	545.7
113	90.000	.91700	1401.0	.4890-01	.6250-01	.6850-01	.9345	.3796-02	.2711-02	.4370	3.246	541.8

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
113	90.000	.93200	1402.0	.5520-01	.7130-01	.7840-01	.9345	.4346-02	.3060-02	.4760	3.529	547.3
113	90.000	.93900	1403.0	.5960-01	.7720-01	.8500-01	.9345	.4714-02	.3303-02	.5080	3.763	549.1
114	95.000	.13560	1484.0	.2663	.4748	.6271	.9345	.3485-01	.1480-01	1.186	8.464	623.5
114	95.000	.13730	1485.0	.2741	.4412	.5440	.9345	.3023-01	.1523-01	1.415	10.16	610.7
114	95.000	.13890	1486.0	.2419	.3765	.4551	.9345	.2529-01	.1344-01	1.322	9.525	605.3
114	95.000	.14560	1487.0	.1715	.2304	.2579	.9345	.1433-01	.9531-02	1.311	9.631	566.0
114	95.000	.14730	1488.0	.1451	.1879	.2067	.9345	.1149-01	.8067-02	1.248	9.244	548.9
113	104.00	.10000+00	1330.0	.2833	.4052	.4493	.9386	.2492-01	.1571-01	1.834	13.34	586.1
113	104.00	.12000	1404.0	.2936	.4973	.6334	.9345	.3513-01	.1628-01	1.398	10.01	617.1
113	104.00	.12700	1405.0	.2910	.4629	.5667	.9345	.3143-01	.1614-01	1.528	10.99	608.3
113	104.00	.13400	1406.0	.2710	.4545	.5752	.9345	.3190-01	.1503-01	1.309	9.379	615.8
113	104.00	.14900	1408.0	.1243	.1610	.1773	.9345	.9831-02	.6893-02	1.062	7.866	548.9
113	104.00	.15500	1409.0	.1402	.1833	.2026	.9345	.1123-01	.7776-02	1.163	8.596	553.3
113	104.00	.16200	1410.0	.1119	.1458	.1609	.9345	.8923-02	.6205-02	.9380	6.938	551.8
113	104.00	.17300	1411.0	.6950-01	.8890-01	.9730-01	.9345	.5397-02	.3854-02	.6210	4.614	541.9
113	104.00	.18000	1412.0	.5940-01	.7550-01	.8240-01	.9345	.4571-02	.3297-02	.5440	4.056	537.8
113	104.00	.18600	1413.0	.5440-01	.6880-01	.7500-01	.9345	.4160-02	.3015-02	.5050	3.765	535.5
113	104.00	.19300	1414.0	.5270-01	.6670-01	.7260-01	.9345	.4029-02	.2923-02	.4900	3.656	535.2
113	104.00	.20000	1415.0	.4950-01	.6280-01	.6850-01	.9345	.3800-02	.2745-02	.4560	3.395	537.0
113	104.00	.25000	1416.0	.3450-01	.4390-01	.4800-01	.9345	.2662-02	.1912-02	.3130	2.367	539.4
114	112.00	.13560	1489.0	.1944	.2702	.3074	.9345	.1709-01	.1080-01	1.355	9.888	578.3
114	112.00	.13730	1490.0	.1867	.2702	.3137	.9345	.1744-01	.1037-01	1.181	8.568	589.8
114	112.00	.13890	1491.0	.1871	.2744	.3208	.9345	.1783-01	.1040-01	1.151	8.338	593.0
114	112.00	.14560	1492.0	.1927	.2611	.2934	.9345	.1631-01	.1071-01	1.437	10.53	569.4
114	112.00	.14730	1493.0	.1672	.2295	.2595	.9345	.1442-01	.9292-02	1.204	8.809	574.0
113	112.50	.74000	1417.0	.1812	.2619	.3038	.9345	.1685-01	.1005-01	1.146	8.319	588.9
113	112.50	.75000	1418.0	.2150	.3190	.3752	.9345	.2081-01	.1192-01	1.286	9.309	595.1
114	112.50	.77100	1419.0	.1086	.1440	.1601	.9345	.8900-02	.6036-02	.8650	6.476	560.4
113	112.50	.92500	1420.0	.5570-01	.7160-01	.7860-01	.9345	.4358-02	.3092-02	.4900	3.638	544.4
113	112.50	.93200	1421.0	.4480-01	.5790-01	.6360-01	.9345	.3529-02	.2482-02	.3850	2.854	547.8
113	112.50	.93900	1422.0	.5220-01	.6750-01	.7420-01	.9345	.4116-02	.2895-02	.4490	3.329	547.8
113	112.50	.95300	1440.0	.6840-01	.8910-01	.9530-01	.9392	.5284-02	.3791-02	.5730	4.241	551.7
114	112.50	.96700	1441.0	.8410-01	.1078	.1148	.9392	.6379-02	.4674-02	.7480	5.558	543.5
114	112.50	.99400	1443.0	.6460-01	.8530-01	.9170-01	.9392	.5097-02	.3588-02	.5180	3.820	559.2
114	135.00	.80000-02	1331.0	.2000-03	.2000-03	.2000-03	.9395	.1347-04	.1016-04	.2000-02	.1400-01	530.4
113	135.00	.25000-01	1332.0	.3128	.4647	.5175	.9395	.2870-01	.1734-01	1.865	13.50	595.4
114	135.00	.50000-01	1333.0	.2563	.3548	.3860	.9395	.2145-01	.1425-01	1.805	13.19	576.9
113	135.00	.75000-01	1334.0	.1353	.1789	.1919	.9395	.1064-01	.7503-02	1.082	8.113	558.7
113	135.00	.10000+00	1335.0	.1508	.2004	.2153	.9395	.1194-01	.8363-02	1.187	8.737	561.0
113	135.00	.40000	1423.0	.9350-01	.1240	.1379	.9345	.7650-02	.5183-02	.7400	5.542	560.2
114	135.00	.92500	1424.0	.3690-01	.4710-01	.5140-01	.9345	.2857-02	.2054-02	.3360	2.504	539.8
114	140.00	.13560	1494.0	.1129	.1492	.1658	.9345	.9214-02	.6273-02	.9060	6.674	559.3
114	140.00	.13730	1495.0	.1194	.1585	.1764	.9345	.9805-02	.6637-02	.9470	6.971	561.0

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
114	140.00	.13890	1496.0	.1198	.1599	.1784	.9345	.9915-02	.6657-02	.9340	6.866	563.4
114	140.00	.14560	1497.0	.1266	.1681	.1871	.9345	.1040-01	.7038-02	1.004	7.391	561.0
114	150.00	.14230	1499.0	.1134	.1491	.1653	.9345	.9185-02	.6305-02	.9270	6.838	556.7
114	180.00	.80000-02	1298.0	.3584	.5316	.5741	.9423	.3191-01	.1992-01	2.151	16.38	595.6
113	180.00	.15000-01	1299.0	.2626	.3595	.3810	.9423	.2118-01	.1460-01	1.906	13.72	573.0
114	180.00	.25000-01	1300.0	.4023	.5718	.6113	.9423	.3390-01	.2231-01	2.644	18.33	584.4
113	180.00	.50000-01	1301.0	.2694	.3690	.3912	.9423	.2175-01	.1497-01	1.950	13.59	573.4
114	180.00	.75000-01	1302.0	.1583	.2097	.2207	.9423	.1224-01	.8778-02	1.257	8.685	559.7
113	180.00	.10000+00	1303.0	.1818	.2475	.2620	.9423	.1456-01	.1010-01	1.339	9.806	571.1
113	225.00	.98000	1425.0	.8780-01	.1271	.1311	.9466	.7270-02	.4868-02	.5530	4.013	589.4
113	225.00	.99400	1426.0	.5740-01	.8260-01	.8510-01	.9466	.4720-02	.3182-02	.3660	2.662	587.8
113	263.00	.13600	1336.0	.7530-01	.9800-01	.1078	.9350	.5977-02	.4176-02	.6330	4.686	551.2
114	263.00	.20000	1472.0	.7490-01	.9520-01	.1037	.9350	.5764-02	.4162-02	.6850	5.099	539.1
114	263.00	.30000	1337.0	.8530-01	.1087	.1185	.9350	.6585-02	.4740-02	.7740	5.856	540.4
114	263.00	.40000	1473.0	.7420-01	.9600-01	.1053	.9350	.5850-02	.4122-02	.6380	4.728	548.8
114	263.00	.50000	1474.0	.7730-01	.9970-01	.1092	.9350	.6070-02	.4297-02	.6730	4.991	547.0
114	263.00	.60000	1475.0	.6350-01	.8210-01	.9000-01	.9350	.5000-02	.3530-02	.5490	4.070	548.0
114	263.00	.75000	1338.0	.5690-01	.7540-01	.8360-01	.9350	.4646-02	.3160-02	.4520	3.328	560.6
114	263.00	.81500	1339.0	.4800-01	.6180-01	.6750-01	.9350	.3754-02	.2670-02	.4230	3.140	545.2
114	263.00	.83700	1340.0	.3500-01	.4500-01	.4920-01	.9350	.2734-02	.1948-02	.3100	2.300	544.6
114	263.00	.88400	1341.0	.2590-01	.3470-01	.3860-01	.9350	.2146-02	.1438-02	.1990	1.465	565.0
114	263.00	.89400	1342.0	.7120-01	.9320-01	.1028	.9350	.5712-02	.3957-02	.5890	4.352	554.7
114	263.00	.92800	1477.0	.6390-01	.8440-01	.9340-01	.9350	.5193-02	.3553-02	.5150	3.795	558.7
113	263.00	.93900	1344.0	.9180-01	.1249	.1401	.9350	.7769-02	.5080-02	.6740	4.939	570.5
114	270.00	.80000-02	1304.0	.2615	.3557	.3621	.9476	.2012-01	.1454-01	1.932	15.16	570.7
114	270.00	.50000-01	1306.0	.2719	.3771	.3844	.9476	.2136-01	.1511-01	1.905	13.25	577.5
113	270.00	.75000-01	1307.0	.1756	.2373	.2415	.9476	.1339-01	.9736-02	1.314	9.184	567.9
114	270.00	.10000+00	1308.0	.1948	.2709	.2761	.9476	.1535-01	.1083-01	1.357	9.907	578.3
113	270.00	.11500	1345.0	.1397	.1948	.2211	.9350	.1226-01	.7745-02	.9610	7.013	578.8
113	277.00	.13600	1346.0	.6630-01	.8570-01	.9390-01	.9350	.5210-02	.3677-02	.5710	4.233	547.6
113	277.00	.30000	1347.0	.8190-01	.1038	.1129	.9350	.6263-02	.4541-02	.7550	5.720	536.7
114	277.00	.40000	1464.0	.7160-01	.9200-01	.1006	.9350	.5594-02	.3979-02	.6300	4.678	545.2
114	277.00	.60000	1466.0	.5440-01	.7110-01	.7830-01	.9350	.4350-02	.3024-02	.4540	3.355	553.5
114	277.00	.70000	1467.0	.5760-01	.7490-01	.8240-01	.9350	.4581-02	.3199-02	.4850	3.588	552.0
113	277.00	.75000	1348.0	.4510-01	.6120-01	.6850-01	.9350	.3798-02	.2501-02	.3350	2.454	569.1
113	277.00	.81500	1349.0	.5460-01	.7160-01	.7900-01	.9350	.4381-02	.3030-02	.4490	3.317	554.7
113	277.00	.83700	1350.0	.5410-01	.7090-01	.7830-01	.9350	.4342-02	.2998-02	.4430	3.271	555.2
113	277.00	.88400	1351.0	.7460-01	.1029	.1161	.9350	.6437-02	.4135-02	.5280	3.864	575.1
113	277.00	.89400	1352.0	.1193	.1576	.1744	.9350	.9670-02	.6619-02	.9590	7.068	558.1
114	277.00	.90000	1468.0	.8480-01	.1134	.1251	.9350	.7009-02	.4715-02	.6590	4.844	563.9
114	277.00	.90700	1353.0	.8300-01	.8640-01	.9720-01	.9350	.5402-02	.3504-02	.4560	3.337	573.5
114	277.00	.92100	1469.0	.1045	.1387	.1558	.9350	.8549-02	.5811-02	.8300	6.109	560.8
114	277.00	.92800	1470.0	.9250-01	.1129	.1269	.9350	.7052-02	.4585-02	.5990	4.388	572.9

IH72, OTS W/PROTUBERANCES, RIGHT SRB

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HI/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
114	277.00	.93700	1471.0	.9430-01	.1315	.1492	.9350	.8293-02	.5242-02	.6520	4.756	579.3
113	277.00	.93900	1354.0	.8140-01	.1185	.1373	.9350	.7616-02	.4515-02	.5070	3.676	590.7
114	335.00	.11000	1309.0	.2117	.2902	.3028	.9444	.1683-01	.1176-01	1.530	11.19	573.6
113	337.50	.74000	1355.0	.1554	.2257	.2623	.9346	.1455-01	.8619-02	.9730	7.058	590.1
113	337.50	.75000	1356.0	.1203	.1845	.2210	.9346	.1226-01	.6669-02	.6730	4.937	602.0
114	337.50	.76500	1357.0	.1316	.1738	.1929	.9346	.1072-01	.7312-02	1.059	7.942	558.7
114	337.50	.92500	1359.0	.8590-01	.1230	.1420	.9346	.7890-02	.4775-02	.5570	4.047	587.0
114	337.50	.93200	1360.0	.1337	.2004	.2369	.9346	.1317-01	.7429-02	.7850	5.674	598.0
114	337.50	.93900	1361.0	.1671	.2662	.3258	.9346	.1811-01	.9286-02	.8770	6.309	609.1

RIGHT SRB

PARAMETRIC DATA

ALPHA = 5.000 BETA = -5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
121	5.000	-5.000	3.010	37.30	706.0	250.9	1.000	6.341	2336.	.3343-03	.2007-06	3.891
122	5.010	-5.000	3.010	37.20	706.0	250.9	.9990	6.335	2336.	.3340-03	.2007-06	3.888

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
121	.5558-01	.9191-02
122	.5555-01	.9196-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
122	.00000	.80000-02	1310.0	.2313	.3091	.3352	.9384	.1862-01	.1285-01	1.800	13.82	565.5
121	.00000	.25000-01	1311.0	.1826	.2421	.2618	.9384	.1455-01	.1015-01	1.458	10.55	562.0
121	.00000	.83700	1364.0	.6630-01	.8530-01	.9360-01	.9345	.5201-02	.3684-02	.5840	4.326	547.2
121	.00000	.88400	1365.0	.1209	.1579	.1745	.9345	.9698-02	.6719-02	1.011	7.466	555.1
121	.00000	.90700	1366.0	.1065	.1380	.1519	.9345	.8441-02	.5920-02	.9160	6.782	550.8
121	5.0000	.75000-01	1313.0	.1064	.1371	.1467	.9387	.8153-02	.5912-02	.9300	6.669	548.3
121	20.000	.75000-01	1316.0	.5060-01	.8230-01	.9430-01	.9398	.5240-02	.2812-02	.2580	1.789	614.0
121	20.000	.10000+00	1318.0	.1065	.1390	.1482	.9398	.8236-02	.5918-02	.8930	6.596	554.7
121	20.000	.11000	1319.0	.1079	.1403	.1494	.9398	.8305-02	.5996-02	.9160	6.769	552.9
121	20.000	.95300	1432.0	.7820-01	.1008	.1067	.9403	.5933-02	.4347-02	.6850	5.074	548.1
122	22.500	.72400	1367.0	.1404	.1919	.2165	.9345	.1203-01	.7798-02	1.025	7.626	574.1
121	22.500	.74000	1368.0	.2080	.2955	.3398	.9345	.1889-01	.1156-01	1.378	10.02	586.4
121	22.500	.75000	1369.0	.2746	.4227	.5075	.9345	.2821-01	.1526-01	1.537	11.08	604.9
122	22.500	.76500	1370.0	.1425	.1864	.2061	.9345	.1145-01	.7916-02	1.185	8.899	555.9
122	22.500	.77100	1371.0	.1082	.1372	.1495	.9345	.8307-02	.6013-02	1.006	7.496	538.2
121	22.500	.92500	1372.0	.6540-01	.8400-01	.9210-01	.9345	.5119-02	.3633-02	.5780	4.291	546.4
121	22.500	.93900	1374.0	.7780-01	.1011	.1115	.9345	.6197-02	.4322-02	.6600	4.882	552.8
121	24.400	.95300	1433.0	.9880-01	.1282	.1356	.9407	.7539-02	.5494-02	.8470	6.266	551.5
121	35.000	.75000-01	1321.0	.1094	.1420	.1499	.9412	.8329-02	.6082-02	.9350	6.693	551.9
121	35.000	.11000	1322.0	.1129	.1465	.1546	.9412	.8594-02	.6276-02	.9660	7.264	551.8

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR07)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
121	35.600	.95300	1434.0	.9110-01	.1177	.1236	.9418	.6871-02	.5062-02	.7890	5.843	549.7
121	40.000	.95300	1435.0	.7910-01	.1021	.1069	.9423	.5942-02	.4399-02	.6890	5.106	548.9
121	45.000	.74000	1375.0	.1570	.2195	.2503	.9345	.1391-01	.8728-02	1.083	8.025	581.6
122	45.000	.75000	1376.0	.1536	.2213	.2564	.9345	.1425-01	.8536-02	.9840	7.261	590.3
122	45.000	.76500	1377.0	.1123	.1489	.1656	.9345	.9199-02	.6241-02	.8970	6.602	561.9
122	45.000	.77100	1378.0	.8660-01	.1122	.1236	.9345	.6864-02	.4811-02	.7430	5.502	551.1
122	45.000	.81500	1379.0	.3850-01	.4960-01	.5450-01	.9345	.3028-02	.2138-02	.3360	2.493	548.3
122	45.000	.88400	1381.0	.6790-01	.8680-01	.9500-01	.9345	.5280-02	.3771-02	.6100	4.531	543.9
122	45.000	.90700	1382.0	.7480-01	.9540-01	.1043	.9345	.5795-02	.4154-02	.6780	5.040	542.4
121	65.000	.11000	1323.0	.1947	.2618	.2718	.9446	.1511-01	.1082-01	1.489	10.75	568.0
121	67.500	.74000	1383.0	.1808	.2531	.2886	.9346	.1604-01	.1005-01	1.241	9.198	582.1
121	67.500	.75000	1384.0	.1975	.2838	.3279	.9346	.1822-01	.1098-01	1.273	9.394	589.7
122	67.500	.77100	1385.0	.9710-01	.1279	.1417	.9346	.7874-02	.5394-02	.7900	5.820	559.2
121	76.000	.10000+00	1324.0	.1895	.2540	.2611	.9460	.1451-01	.1053-01	1.464	10.75	566.6
121	76.000	.14100	1386.0	.1293	.1686	.1858	.9348	.1032-01	.7189-02	1.090	8.053	554.0
121	76.000	.14800	1387.0	.8230-01	.1039	.1130	.9348	.6278-02	.4571-02	.7740	5.772	536.3
121	76.000	.15500	1388.0	.5910-01	.7380-01	.7990-01	.9348	.4439-02	.3283-02	.5800	4.342	528.9
121	76.000	.16200	1389.0	.4640-01	.5770-01	.6230-01	.9348	.3462-02	.2580-02	.4660	3.495	525.0
121	76.000	.25000	1390.0	.7100-02	.8700-02	.9300-02	.9348	.5195-03	.3939-03	.7500-01	.5750	515.2
121	77.500	.95300	1436.0	.9370-01	.1196	.1217	.9469	.6766-02	.5208-02	.8480	6.298	542.8
121	77.500	.99400	1439.0	.7600-01	.1001	.1021	.9469	.5673-02	.4226-02	.6210	4.576	558.7
122	90.000	.15000-01	1325.0	.2732	.3718	.3785	.9476	.2103-01	.1517-01	2.018	15.02	572.6
121	90.000	.25000-01	1326.0	.3105	.4471	.4570	.9475	.2540-01	.1726-01	1.992	14.22	590.2
122	90.000	.40000-01	1327.0	.2452	.3307	.3364	.9476	.1869-01	.1362-01	1.860	13.64	569.1
121	90.000	.60000-01	1328.0	.1816	.2413	.2453	.9475	.1363-01	.1009-01	1.439	9.924	563.0
121	90.000	.75000-01	1329.0	.1094	.1418	.1439	.9475	.7995-02	.6079-02	.9390	6.414	551.1
122	90.000	.13230	1479.0	.2618	.6868	1.338	.9350	.7432-01	.1454-01	.8290	5.849	648.6
122	90.000	.13390	1480.0	.2998	.6745	1.079	.9350	.5991-01	.1666-01	1.058	7.485	642.1
122	90.000	.13560	1481.0	.2637	.4330	.5362	.9350	.2979-01	.1465-01	1.322	9.475	615.4
122	90.000	.13730	1482.0	.2384	.3399	.3896	.9350	.2164-01	.1324-01	1.564	11.37	587.5
122	90.000	.13890	1483.0	.1776	.2356	.2612	.9350	.1451-01	.9867-02	1.414	10.40	562.3
122	90.000	.55000	1391.0	.1077	.1393	.1528	.9350	.8486-02	.5985-02	.9310	6.896	550.0
122	90.000	.65000	1392.0	.7390-01	.9570-01	.1050	.9350	.5834-02	.4104-02	.6350	4.697	551.0
121	90.000	.74000	1393.0	.3550-01	.4640-01	.5110-01	.9350	.2838-02	.1975-02	.2980	2.237	554.8
121	90.000	.76500	1394.0	.1392	.1875	.2093	.9350	.1163-01	.7734-02	1.059	7.766	568.7
121	90.000	.77100	1395.0	.9330-01	.1231	.1362	.9350	.7568-02	.5184-02	.7550	5.558	560.1
121	90.000	.81500	1396.0	.6100-01	.7950-01	.8750-01	.9350	.4862-02	.3389-02	.5130	3.854	554.2
121	90.000	.83700	1397.0	.6910-01	.8960-01	.9840-01	.9350	.5471-02	.3839-02	.5900	4.363	551.9
121	90.000	.88400	1398.0	.8600-01	.1109	.1214	.9350	.6749-02	.4780-02	.7510	5.566	548.5
121	90.000	.89400	1399.0	.6770-01	.8470-01	.9150-01	.9350	.5087-02	.3764-02	.6630	4.964	529.3
121	90.000	.90700	1400.0	.5650-01	.7210-01	.7860-01	.9350	.4366-02	.3139-02	.5120	3.804	542.5
121	90.000	.91700	1401.0	.5770-01	.7330-01	.7980-01	.9350	.4435-02	.3205-02	.5300	3.943	540.3
121	90.000	.93200	1402.0	.6260-01	.8030-01	.8770-01	.9350	.4877-02	.3479-02	.5560	4.129	545.7

IH72. OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR07)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
121	90.000	.93900	1403.0	.6840-01	.8810-01	.9650-01	.9350	.5363-02	.3799-02	.5970	4.427	548.3
122	95.000	.13560	1484.0	.2579	.4595	.5989	.9351	.3327-01	.1433-01	1.152	8.219	625.2
122	95.000	.13730	1485.0	.2599	.4165	.5075	.9351	.2819-01	.1444-01	1.355	9.732	611.7
122	95.000	.13890	1486.0	.2080	.3252	.3908	.9351	.2171-01	.1156-01	1.131	8.139	607.7
122	95.000	.14560	1487.0	.1910	.2624	.2953	.9351	.1641-01	.1061-01	1.375	10.05	576.0
122	95.000	.14730	1488.0	.1419	.1891	.2099	.9351	.1166-01	.7881-02	1.113	8.182	564.4
121	104.00	.10000+00	1330.0	.2269	.3115	.3142	.9488	.1746-01	.1261-01	1.639	11.98	575.7
121	104.00	.12000	1404.0	.2676	.4425	.5481	.9353	.3046-01	.1487-01	1.327	9.506	616.4
121	104.00	.12700	1405.0	.2658	.4186	.5038	.9353	.2800-01	.1477-01	1.428	10.27	608.9
121	104.00	.13400	1406.0	.2648	.4455	.5575	.9353	.3099-01	.1472-01	1.280	9.161	618.6
121	104.00	.14800	1408.0	.1439	.1956	.2187	.9353	.1215-01	.8000-02	1.069	7.827	572.0
121	104.00	.15500	1409.0	.1453	.1999	.2248	.9353	.1249-01	.8076-02	1.043	7.623	576.4
121	104.00	.16200	1410.0	.1238	.1670	.1861	.9353	.1034-01	.6881-02	.9390	6.886	569.2
121	104.00	.17300	1411.0	.9200-01	.1185	.1295	.9353	.7196-02	.5112-02	.8060	5.975	547.9
121	104.00	.18000	1412.0	.7640-01	.9750-01	.1061	.9353	.5894-02	.4248-02	.6950	5.164	542.1
121	104.00	.18600	1413.0	.6800-01	.8640-01	.9390-01	.9353	.5218-02	.3781-02	.6270	4.666	539.8
121	104.00	.19300	1414.0	.5810-01	.7380-01	.8010-01	.9353	.4453-02	.3231-02	.5380	4.003	539.2
121	104.00	.20000	1415.0	.5680-01	.7220-01	.7850-01	.9353	.4363-02	.3155-02	.5200	3.871	540.7
121	104.00	.25000	1416.0	.6380-01	.8140-01	.8860-01	.9353	.4922-02	.3546-02	.5800	4.381	542.2
122	112.00	.13560	1489.0	.1852	.2542	.2852	.9354	.1584-01	.1029-01	1.337	9.770	575.7
122	112.00	.13730	1490.0	.1975	.2809	.3204	.9354	.1780-01	.1097-01	1.304	9.476	586.8
122	112.00	.13890	1491.0	.2058	.2960	.3393	.9354	.1885-01	.1143-01	1.325	9.614	589.8
122	112.00	.14560	1492.0	.2089	.2853	.3194	.9354	.1774-01	.1161-01	1.530	11.19	573.8
122	112.00	.14730	1493.0	.1945	.2733	.3099	.9354	.1721-01	.1081-01	1.323	9.638	583.2
121	112.50	.74000	1417.0	.1737	.2651	.3132	.9354	.1741-01	.9653-02	.9880	7.121	603.3
121	112.50	.75000	1418.0	.2866	.5302	.7053	.9354	.3920-01	.1593-01	1.223	8.707	628.8
122	112.50	.77100	1419.0	.1487	.2124	.2426	.9354	.1348-01	.8262-02	.9730	7.187	587.9
121	112.50	.92500	1420.0	.6760-01	.8680-01	.9470-01	.9354	.5261-02	.3755-02	.5980	4.435	546.4
121	112.50	.93200	1421.0	.5910-01	.7720-01	.8480-01	.9354	.4714-02	.3283-02	.4930	3.641	555.4
121	112.50	.9390C	1422.0	.6060-01	.7980-01	.8790-01	.9354	.4887-02	.3366-02	.4930	3.634	559.1
121	112.50	.9530C	1440.0	.9320-01	.1229	.1226	.9503	.6817-02	.5180-02	.7570	5.578	559.5
122	112.50	.96700	1441.0	.1033	.1386	.1383	.9503	.7683-02	.5737-02	.7940	5.830	567.2
122	112.50	.99400	1443.0	.7380-01	.1009	.1007	.9503	.5592-02	.4101-02	.5390	3.946	574.1
122	135.00	.80000-02	1331.0	.4000-03	.5000-03	.5000-03	.9502	.2950-04	.2354-04	.4000-02	.3200-01	531.5
121	135.00	.25000-01	1332.0	.3126	.4637	.4631	.9501	.2574-01	.1737-01	1.880	13.60	597.4
122	135.00	.50000-01	1333.0	.2562	.3520	.3516	.9502	.1953-01	.1423-01	1.845	13.48	576.0
121	135.00	.75000-01	1334.0	.1340	.1793	.1792	.9501	.9958-02	.7450-02	1.041	7.774	565.9
121	135.00	.10000+00	1335.0	.1675	.2278	.2276	.9501	.1265-01	.9308-02	1.240	9.076	572.4
121	135.00	.40000	1423.0	.1013	.1361	.1511	.9356	.8396-02	.5631-02	.7770	5.802	567.6
122	135.00	.92500	1424.0	.6360-01	.8790-01	.9880-01	.9356	.5487-02	.3532-02	.4510	3.290	578.0
122	140.00	.13560	1494.0	.1240	.1658	.1837	.9356	.1021-01	.6887-02	.9630	7.072	565.8
122	140.00	.13730	1495.0	.1276	.1710	.1895	.9356	.1053-01	.7090-02	.9870	7.244	566.5
122	140.00	.13890	1496.0	.1332	.1778	.1968	.9356	.1093-01	.7402-02	1.041	7.652	564.9

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
122	140.00	.14560	1497.0	.1361	.1803	.1989	.9356	.1105-01	.7558-02	1.087	8.004	561.7
122	150.00	.14230	1499.0	.1228	.1619	.1784	.9355	.9908-02	.6822-02	.9970	7.344	559.5
122	180.00	.80000-02	1298.0	.3191	.4724	.4839	.9475	.2688-01	.1772-01	1.926	14.67	596.9
121	180.00	.15000-01	1299.0	.2709	.3699	.3767	.9475	.2092-01	.1505-01	1.984	14.28	573.8
122	180.00	.25000-01	1300.0	.3789	.5340	.5450	.9475	.3029-01	.2106-01	2.559	17.74	584.1
121	180.00	.50000-01	1301.0	.2520	.3438	.3501	.9475	.1945-01	.1400-01	1.850	12.89	573.5
122	180.00	.75000-01	1302.0	.1620	.2173	.2210	.9475	.1228-01	.9003-02	1.249	8.593	566.9
121	180.00	.10000+00	1303.0	.1886	.2583	.2631	.9475	.1461-01	.1048-01	1.371	10.02	574.8
121	225.00	.98000	1425.0	.1292	.1805	.1914	.9429	.1064-01	.7180-02	.8910	6.492	581.6
121	225.00	.99400	1426.0	.1008	.1394	.1475	.9429	.8197-02	.5604-02	.7140	5.213	578.2
122	263.00	.13600	1336.0	.4400-01	.5500-01	.5950-01	.9345	.3312-02	.2445-02	.4320	3.231	529.0
122	263.00	.20000	1472.0	.4700-01	.5820-01	.6280-01	.9345	.3487-02	.2612-02	.4810	3.613	521.5
122	263.00	.30000	1337.0	.5560-01	.6850-01	.7390-01	.9345	.4105-02	.3086-02	.5750	4.394	519.4
122	263.00	.40000	1473.0	.3900-01	.4880-01	.5290-01	.9345	.2936-02	.2166-02	.3810	2.854	529.5
122	263.00	.50000	1474.0	.4680-01	.5860-01	.6350-01	.9345	.3528-02	.2602-02	.4580	3.426	529.6
122	263.00	.60000	1475.0	.5210-01	.6490-01	.7030-01	.9345	.3906-02	.2895-02	.5170	3.875	526.9
122	263.00	.75000	1338.0	.6660-01	.8450-01	.9220-01	.9345	.5119-02	.3699-02	.6160	4.586	539.1
122	263.00	.81500	1339.0	.4410-01	.5520-01	.5980-01	.9345	.3322-02	.2450-02	.4320	3.229	529.5
122	263.00	.83700	1340.0	.4000-01	.5010-01	.5430-01	.9345	.3018-02	.2223-02	.3900	2.918	530.1
122	263.00	.88400	1341.0	.5340-01	.6810-01	.7440-01	.9345	.4133-02	.2965-02	.4850	3.605	542.1
122	263.00	.89400	1342.0	.7190-01	.9130-01	.9970-01	.9345	.5539-02	.3994-02	.6620	4.924	539.9
122	263.00	.92800	1477.0	.8900-01	.1141	.1250	.9345	.6944-02	.4946-02	.7940	5.896	545.0
121	263.00	.93900	1344.0	.1076	.1400	.1545	.9345	.8587-02	.5979-02	.9100	6.726	553.4
122	270.00	.80000-02	1304.0	.1990	.2605	.2806	.9384	.1559-01	.1106-01	1.653	13.07	556.1
122	270.00	.50000-01	1306.0	.1756	.2279	.2448	.9384	.1360-01	.9756-02	1.501	10.57	551.8
121	270.00	.75000-01	1307.0	.1115	.1445	.1552	.9384	.8623-02	.6199-02	.9580	6.751	551.1
122	270.00	.10000+00	1308.0	.1253	.1635	.1759	.9384	.9773-02	.6961-02	1.051	7.766	554.6
121	270.00	.11500	1345.0	.9720-01	.1281	.1421	.9345	.7898-02	.5403-02	.7900	5.824	559.3
121	277.00	.13600	1346.0	.4060-01	.5080-01	.5510-01	.9345	.3061-02	.2258-02	.3970	2.973	529.6
121	277.00	.30000	1347.0	.5590-01	.6910-01	.7450-01	.9345	.4140-02	.3109-02	.5770	4.415	519.9
122	277.00	.40000	1464.0	.3800-01	.4750-01	.5150-01	.9345	.2862-02	.2110-02	.3710	2.775	529.8
122	277.00	.60000	1466.0	.5690-01	.7100-01	.7690-01	.9345	.4270-02	.3162-02	.5640	4.221	527.4
122	277.00	.70000	1467.0	.4470-01	.5600-01	.6070-01	.9345	.3374-02	.2483-02	.4350	3.251	530.5
121	277.00	.75000	1348.0	.6260-01	.7990-01	.8730-01	.9345	.4854-02	.3481-02	.5690	4.226	542.3
121	277.00	.81500	1349.0	.4760-01	.6000-01	.6530-01	.9345	.3629-02	.2648-02	.4520	3.376	534.7
121	277.00	.83700	1350.0	.5000-01	.6320-01	.6890-01	.9345	.3830-02	.2777-02	.4670	3.478	537.5
121	277.00	.88400	1351.0	.8210-01	.1056	.1159	.9345	.6443-02	.4566-02	.7240	5.370	547.0
121	277.00	.89400	1352.0	.7060-01	.9000-01	.9830-01	.9345	.5465-02	.3923-02	.6430	4.778	541.8
122	277.00	.90000	1468.0	.6330-01	.8110-01	.8880-01	.9345	.4935-02	.3516-02	.5650	4.194	544.9
122	277.00	.90700	1353.0	.7070-01	.9100-01	.9990-01	.9345	.5552-02	.3926-02	.6200	4.594	547.8
122	277.00	.92100	1469.0	.7310-01	.9300-01	.1016	.9345	.5642-02	.4059-02	.6680	4.974	540.9
122	277.00	.92800	1470.0	.6840-01	.8910-01	.9840-01	.9345	.5465-02	.3798-02	.5760	4.254	554.0
122	277.00	.93700	1471.0	.8790-01	.1137	.1251	.9345	.6951-02	.4885-02	.7590	5.622	550.1

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR07)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
122	335.00	.11000	1309.0	.1193	.1547	.1672	.9375	.9288-02	.6627-02	1.021	7.551	551.6
121	337.50	.74000	1355.0	.1236	.1692	.1911	.9345	.1062-01	.6867-02	.8980	6.569	574.8
121	337.50	.75000	1356.0	.1687	.2414	.2786	.9345	.1548-01	.9376-02	1.099	8.114	588.4
122	337.50	.76500	1357.0	.1230	.1570	.1717	.9345	.9536-02	.6832-02	1.113	8.414	542.6
122	337.50	.92500	1359.0	.9060-01	.1166	.1279	.9345	.7107-02	.5031-02	.7960	5.900	547.4
122	337.50	.93200	1360.0	.1043	.1349	.1484	.9345	.8242-02	.5793-02	.9010	6.671	550.1
122	337.50	.93900	1361.0	.1353	.1754	.1931	.9345	.1073-01	.7514-02	1.159	8.574	551.4

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR08)

RIGHT SRB

PARAMETRIC DATA

ALPHA = 5.000 BETA = .0000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
117	4.960	.0000	3.010	37.20	704.0	250.4	.9980	6.330	2334.	.3344-03	.2004-06	3.895
118	4.960	.0000	3.010	37.20	705.0	250.5	.9980	6.327	2335.	.3341-03	.2004-06	3.891

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
117	.5551-01	.9188-02
118	.5550-01	.9193-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
118	.00000	.80000-02	1310.0	.2811	.3702	.3993	.9385	.2216-01	.1560-01	2.284	17.61	558.1
117	.00000	.25000-01	1311.0	.2306	.3040	.3280	.9385	.1821-01	.1280-01	1.867	13.53	558.4
117	.00000	.83700	1364.0	.5770-01	.7430-01	.8160-01	.9345	.4530-02	.3203-02	.5050	3.741	546.8
117	.00000	.88400	1365.0	.8130-01	.1068	.1183	.9345	.6567-02	.4512-02	.6650	4.907	556.9
117	.00000	.90700	1366.0	.6230-01	.8230-01	.9140-01	.9345	.5076-02	.3458-02	.5010	3.689	559.5
117	5.0000	.75000-01	1313.0	.1351	.1734	.1855	.9385	.1030-01	.7498-02	1.195	8.582	544.9
117	15.600	.95300	1431.0	.1209	.1634	.1770	.9391	.9824-02	.6713-02	.9090	6.670	568.8
117	20.000	.75000-01	1316.0	.8070-01	.1242	.1414	.9387	.7851-02	.4481-02	.4510	3.144	603.7
117	20.000	.10000+00	1318.0	.1369	.1766	.1891	.9387	.1050-01	.7598-02	1.188	8.805	547.9
117	20.000	.11000	1319.0	.1373	.1763	.1885	.9387	.1046-01	.7620-02	1.211	8.985	545.4
117	20.000	.95300	1432.0	.9400-01	.1244	.1339	.9391	.7431-02	.5217-02	.7500	5.525	560.5
118	22.500	.72400	1367.0	.1094	.1474	.1653	.9345	.9173-02	.6071-02	.8280	6.182	568.1
117	22.500	.74000	1368.0	.1421	.1936	.2181	.9345	.1211-01	.7886-02	1.044	7.643	571.9
117	22.500	.75000	1369.0	.1872	.2654	.3048	.9345	.1692-01	.1039-01	1.243	9.045	584.7
118	22.500	.76500	1370.0	.1224	.1605	.1777	.9345	.9860-02	.6795-02	1.009	7.573	556.1
118	22.500	.77100	1371.0	.1030	.1326	.1457	.9345	.8084-02	.5716-02	.9000	6.677	547.0
117	22.500	.92500	1372.0	.3070-01	.3910-01	.4270-01	.9345	.2371-02	.1706-02	.2800	2.086	539.9
117	22.500	.93900	1374.0	.5220-01	.6740-01	.7400-01	.9345	.4109-02	.2901-02	.4550	3.373	547.4
117	24.400	.95300	1433.0	.1118	.1496	.1613	.9392	.8953-02	.6208-02	.8660	6.365	564.7
117	35.000	.75000-01	1321.0	.1525	.1965	.2096	.9391	.1164-01	.8468-02	1.334	9.571	546.8

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
117	35.000	.11000	1322.0	.1437	.1839	.1959	.9391	.1087-01	.7976-02	1.284	9.701	543.3
117	35.600	.95300	1434.0	.7640-01	.9990-01	.1068	.9396	.5927-02	.4239-02	.6340	4.679	554.8
117	40.000	.95300	1435.0	.5700-01	.7400-01	.7880-01	.9398	.4373-02	.3167-02	.4870	3.605	550.5
117	45.000	.74000	1375.0	.1544	.2093	.2352	.9345	.1306-01	.8573-02	1.151	8.582	570.0
117	45.000	.75000	1376.0	.1882	.2616	.2977	.9345	.1652-01	.1045-01	1.310	9.724	578.8
118	45.000	.76500	1377.0	.1210	.1619	.1808	.9345	.1004-01	.6716-02	.9370	6.884	565.0
118	45.000	.77100	1378.0	.8960-01	.1174	.1299	.9345	.7209-02	.4974-02	.7410	5.467	555.7
118	45.000	.81500	1379.0	.4800-01	.6250-01	.6900-01	.9345	.3830-02	.2662-02	.4030	2.979	553.1
118	45.000	.88400	1381.0	.2220-01	.2850-01	.3120-01	.9345	.1734-02	.1232-02	.1960	1.455	545.3
118	45.000	.90700	1382.0	.1600-01	.2030-01	.2220-01	.9345	.1233-02	.8886-03	.1470	1.094	539.2
117	65.000	.11000	1323.0	.2339	.3114	.3323	.9405	.1845-01	.1298-01	1.836	13.28	562.9
117	67.500	.74000	1383.0	.1531	.2070	.2324	.9345	.1290-01	.8500-02	1.150	8.573	569.0
117	67.500	.75000	1384.0	.1495	.2078	.2364	.9345	.1313-01	.8299-02	1.041	7.728	578.8
118	67.500	.77100	1385.0	.7310-01	.9630-01	.1067	.9345	.5924-02	.4057-02	.5940	4.379	558.1
117	76.000	.10000+00	1324.0	.2224	.2995	.3188	.9413	.1770-01	.1234-01	1.688	12.39	567.5
117	76.000	.14100	1386.0	.1566	.2062	.2286	.9345	.1269-01	.8695-02	1.274	9.397	557.7
117	76.000	.14800	1387.0	.9440-01	.1191	.1297	.9345	.7198-02	.5241-02	.8890	6.636	534.6
117	76.000	.15500	1388.0	.7130-01	.8860-01	.9590-01	.9345	.5323-02	.3957-02	.7110	5.336	524.5
117	76.000	.16200	1389.0	.4710-01	.5830-01	.6290-01	.9345	.3491-02	.2614-02	.4800	3.611	520.5
117	76.000	.25000	1390.0	.9600-02	.1160-01	.1250-01	.9345	.6922-03	.5316-03	.1060	.8140	505.5
117	77.500	.95300	1436.0	.4920-01	.6310-01	.6610-01	.9420	.3672-02	.2732-02	.4360	3.236	544.7
117	77.500	.99400	1439.0	.4270-01	.5640-01	.5950-01	.9420	.3303-02	.2370-02	.3430	2.527	559.6
118	90.000	.15000-01	1325.0	.2957	.3959	.4175	.9423	.2318-01	.1641-01	2.285	17.07	565.3
117	90.000	.25000-01	1326.0	.3433	.4886	.5225	.9423	.2901-01	.1906-01	2.256	16.14	585.9
118	90.000	.40000-01	1327.0	.2673	.3588	.3786	.9423	.2101-01	.1484-01	2.051	15.06	566.3
117	90.000	.60000-01	1328.0	.2101	.2765	.2906	.9423	.1613-01	.1166-01	1.710	11.82	557.6
117	90.000	.75000-01	1329.0	.1141	.1471	.1540	.9423	.8548-02	.6336-02	.9950	6.807	547.3
118	90.000	.13230	1479.0	.3600	.8997	1.681	.9345	.9329-01	.1998-01	1.174	8.289	645.8
118	90.000	.13390	1480.0	.3577	.8411	1.448	.9345	.8034-01	.1985-01	1.217	8.606	643.2
118	90.000	.13560	1481.0	.3102	.5691	.7678	.9345	.4262-01	.1722-01	1.333	9.500	627.1
118	90.000	.13730	1482.0	.2147	.3354	.4061	.9345	.2254-01	.1192-01	1.167	8.401	606.6
118	90.000	.13890	1483.0	.1387	.1928	.2193	.9345	.1217-01	.7696-02	.9650	7.045	579.1
118	90.000	.55000	1391.0	.1112	.1445	.1593	.9345	.8842-02	.6172-02	.9430	6.978	551.7
118	90.000	.65000	1392.0	.8970-01	.1180	.1308	.9345	.7259-02	.4978-02	.7310	5.391	557.7
117	90.000	.74000	1393.0	.3930-01	.5130-01	.5660-01	.9345	.3143-02	.2181-02	.3290	2.471	553.5
117	90.000	.76500	1394.0	.1520	.2022	.2253	.9345	.1251-01	.8438-02	1.196	8.800	562.5
117	90.000	.77100	1395.0	.8610-01	.1137	.1262	.9345	.7004-02	.4780-02	.6940	5.118	559.0
117	90.000	.81500	1396.0	.3300-01	.4350-01	.4830-01	.9345	.2681-02	.1832-02	.2670	2.000	558.6
117	90.000	.83700	1397.0	.6250-01	.8160-01	.9010-01	.9345	.5000-02	.3471-02	.5240	3.870	553.4
117	90.000	.88400	1398.0	.8270-01	.1070	.1177	.9345	.6534-02	.4593-02	.7130	5.282	549.0
117	90.000	.89400	1399.0	.7880-01	.9760-01	.1055	.9345	.5855-02	.4372-02	.7960	5.979	522.2
117	90.000	.90700	1400.0	.5500-01	.6990-01	.7640-01	.9345	.4239-02	.3051-02	.5020	3.735	539.7
117	90.000	.91700	1401.0	.4520-01	.5730-01	.6250-01	.9345	.3469-02	.2510-02	.4190	3.120	537.4

IH72, OTS W/PROTUBERANCES, RIGHT SRB

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HI/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
117	90.000	.93200	1402.0	.4750-01	.6090-01	.6670-01	.9345	.3702-02	.2636-02	.4220	3.136	544.1
117	90.000	.93900	1403.0	.4930-01	.6340-01	.6950-01	.9345	.3858-02	.2738-02	.4350	3.228	545.4
118	95.000	.13560	1484.0	.3185	.5700	.7547	.9345	.4189-01	.1768-01	1.411	10.07	624.7
118	95.000	.13730	1485.0	.2829	.4665	.5839	.9345	.3241-01	.1570-01	1.406	10.08	615.0
118	95.000	.13890	1486.0	.2222	.3574	.4405	.9345	.2445-01	.1233-01	1.148	8.247	611.4
118	95.000	.14560	1487.0	.1860	.2559	.2896	.9345	.1608-01	.1032-01	1.331	9.727	575.6
118	95.000	.14730	1488.0	.1462	.1936	.2152	.9345	.1194-01	.8113-02	1.167	8.597	560.6
117	104.00	.10000+00	1330.0	.2497	.3448	.3629	.9435	.2015-01	.1386-01	1.768	12.92	576.7
117	104.00	.12000	1404.0	.3320	.5332	.6565	.9345	.3644-01	.1843-01	1.719	12.35	611.0
117	104.00	.12700	1405.0	.3191	.4893	.5860	.9345	.3253-01	.1771-01	1.793	12.93	603.0
117	104.00	.13400	1406.0	.3059	.5118	.6466	.9345	.3589-01	.1698-01	1.486	10.64	616.8
117	104.00	.14800	1408.0	.1423	.1896	.2114	.9345	.1174-01	.7899-02	1.114	8.195	563.2
117	104.00	.15500	1409.0	.1494	.2029	.2283	.9345	.1267-01	.8292-02	1.106	8.107	570.8
117	104.00	.16200	1410.0	.1271	.1706	.1908	.9345	.1059-01	.7057-02	.9750	7.162	566.1
117	104.00	.17300	1411.0	.9280-01	.1189	.1302	.9345	.7229-02	.5150-02	.8260	6.131	544.0
117	104.00	.18000	1412.0	.7510-01	.9510-01	.1037	.9345	.5757-02	.4168-02	.6970	5.192	537.1
117	104.00	.18600	1413.0	.6130-01	.7720-01	.8400-01	.9345	.4662-02	.3401-02	.5800	4.330	533.7
117	104.00	.19300	1414.0	.5560-01	.6990-01	.7590-01	.9345	.4214-02	.3085-02	.5310	3.968	532.1
117	104.00	.20000	1415.0	.5430-01	.6840-01	.7440-01	.9345	.4133-02	.3013-02	.5130	3.829	534.0
117	104.00	.25000	1416.0	.5200-01	.6550-01	.7130-01	.9345	.3956-02	.2888-02	.4930	3.742	533.6
118	112.00	.13560	1489.0	.1882	.2589	.2929	.9346	.1626-01	.1045-01	1.348	9.857	575.5
118	112.00	.13730	1490.0	.2143	.3053	.3513	.9346	.1950-01	.1190-01	1.406	10.22	586.3
118	112.00	.13890	1491.0	.2152	.3095	.3579	.9346	.1987-01	.1195-01	1.381	10.03	588.9
118	112.00	.14560	1492.0	.2110	.2861	.3215	.9346	.1785-01	.1171-01	1.570	11.50	570.5
118	112.00	.14730	1493.0	.1801	.2513	.2862	.9346	.1588-01	.9998-02	1.244	9.073	580.1
117	112.50	.74000	1417.0	.1271	.1993	.2417	.9346	.1342-01	.7054-02	.6850	4.932	607.1
117	112.50	.75000	1418.0	.2242	.4054	.5402	.9346	.2999-01	.1244-01	.9800	6.991	625.5
118	112.50	.77100	1419.0	.1092	.1564	.1805	.9346	.1002-01	.6059-02	.7070	5.222	587.9
117	112.50	.92500	1420.0	.6360-01	.8060-01	.8780-01	.9346	.4876-02	.3529-02	.5880	4.384	537.5
117	112.50	.93200	1421.0	.5150-01	.6620-01	.7260-01	.9346	.4028-02	.2860-02	.4550	3.373	545.3
117	112.50	.93900	1422.0	.6160-01	.7910-01	.8680-01	.9346	.4817-02	.3418-02	.5420	4.025	545.5
117	112.50	.95300	1440.0	.9220-01	.1187	.1223	.9449	.6789-02	.5120-02	.8090	5.997	546.3
118	112.50	.96700	1441.0	.8680-01	.1137	.1174	.9449	.6516-02	.4819-02	.7190	5.307	555.4
118	112.50	.99400	1443.0	.6060-01	.8260-01	.8580-01	.9449	.4765-02	.3362-02	.4430	3.246	572.6
118	135.00	.80000-02	1331.0	.1100-02	.1400-02	.1400-02	.9459	.7830-04	.6113-04	.1100-01	.8400-01	530.7
117	135.00	.25000-01	1332.0	.3429	.5031	.5231	.9459	.2904-01	.1903-01	2.105	15.25	593.7
118	135.00	.50000-01	1333.0	.2754	.3789	.3909	.9459	.2170-01	.1528-01	1.971	14.41	575.6
117	135.00	.75000-01	1334.0	.1372	.1825	.1876	.9459	.1042-01	.7615-02	1.079	8.076	562.5
117	135.00	.10000+00	1335.0	.1789	.2403	.2473	.9459	.1373-01	.9932-02	1.369	10.05	566.5
117	135.00	.40000	1423.0	.9350-01	.1231	.1362	.9347	.7563-02	.5191-02	.7610	5.706	557.7
118	135.00	.92500	1424.0	.6160-01	.8130-01	.9010-01	.9347	.5003-02	.3417-02	.4960	3.654	559.4
118	140.00	.13560	1494.0	.1210	.1607	.1785	.9348	.9907-02	.6715-02	.9580	7.049	561.9
118	140.00	.13730	1495.0	.1230	.1636	.1819	.9348	.1010-01	.6827-02	.9690	7.128	562.6

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
118	140.00	.13890	1496.0	.1278	.1696	.1884	.9348	.1046-01	.7095-02	1.014	7.462	561.6
118	140.00	.14560	1497.0	.1407	.1855	.2054	.9348	.1140-01	.7812-02	1.141	8.409	558.5
118	150.00	.14230	1499.0	.1229	.1612	.1780	.9349	.9879-02	.6820-02	1.011	7.459	556.3
118	180.00	.80000-02	1298.0	.3539	.5189	.5309	.9476	.2947-01	.1964-01	2.175	16.58	593.8
118	180.00	.15000-01	1299.0	.2952	.4037	.4110	.9476	.2281-01	.1639-01	2.149	15.47	573.4
117	180.00	.25000-01	1300.0	.4367	.6145	.6268	.9476	.3480-01	.2424-01	2.951	20.47	582.5
118	180.00	.50000-01	1301.0	.2838	.3890	.3962	.9476	.2199-01	.1575-01	2.051	14.29	574.3
117	180.00	.75000-01	1302.0	.1787	.2383	.2422	.9476	.1345-01	.9920-02	1.397	9.631	563.4
118	180.00	.10000+00	1303.0	.2093	.2901	.2957	.9476	.1641-01	.1162-01	1.469	10.73	578.1
117	225.00	.98000	1425.0	.8630-01	.1289	.1333	.9466	.7400-02	.4789-02	.5100	3.687	597.8
117	225.00	.99400	1426.0	.3530-01	.5160-01	.5320-01	.9466	.2955-02	.1958-02	.2180	1.581	592.8
117	263.00	.13600	1336.0	.6550-01	.8210-01	.8910-01	.9345	.4945-02	.3638-02	.6350	4.749	529.7
118	263.00	.20000	1472.0	.6960-01	.8620-01	.9310-01	.9345	.5166-02	.3861-02	.7050	5.294	521.9
118	263.00	.30000	1337.0	.6010-01	.7410-01	.7990-01	.9345	.4434-02	.3336-02	.6220	4.756	518.2
118	263.00	.40000	1473.0	.5830-01	.7360-01	.8010-01	.9345	.4445-02	.3235-02	.5480	4.091	535.0
118	263.00	.50000	1474.0	.3630-01	.4550-01	.4940-01	.9345	.2740-02	.2016-02	.3530	2.637	529.7
118	263.00	.60000	1475.0	.5730-01	.7190-01	.7810-01	.9345	.4333-02	.3178-02	.5500	4.113	531.4
118	263.00	.75000	1338.0	.5770-01	.7390-01	.8100-01	.9345	.4496-02	.3203-02	.5140	3.817	544.1
118	263.00	.81500	1339.0	.5130-01	.6460-01	.7020-01	.9345	.3894-02	.2849-02	.4900	3.659	532.6
118	263.00	.83700	1340.0	.5080-01	.6380-01	.6930-01	.9345	.3848-02	.2820-02	.4870	3.639	531.8
118	263.00	.88400	1341.0	.8430-01	.1085	.1191	.9345	.6608-02	.4678-02	.7390	5.479	546.6
118	263.00	.89400	1342.0	.8890-01	.1126	.1228	.9345	.6816-02	.4935-02	.8250	6.150	537.3
118	263.00	.92800	1477.0	.9500-01	.1237	.1365	.9345	.7574-02	.5273-02	.8010	5.921	552.7
117	263.00	.93900	1344.0	.9400-01	.1241	.1377	.9345	.7646-02	.5218-02	.7580	5.588	559.0
118	270.00	.80000-02	1304.0	.2357	.3079	.3231	.9423	.1793-01	.1308-01	1.964	15.55	554.4
118	270.00	.50000-01	1306.0	.2268	.2973	.3122	.9423	.1733-01	.1259-01	1.869	13.14	556.0
117	270.00	.75000-01	1307.0	.1476	.1910	.2000	.9423	.1110-01	.8195-02	1.271	8.968	549.1
118	270.00	.10000+00	1308.0	.1658	.2193	.2308	.9423	.1281-01	.9202-02	1.328	9.778	560.3
117	270.00	.11500	1345.0	.1277	.1696	.1888	.9345	.1048-01	.7087-02	1.010	7.435	561.7
117	277.00	.13600	1346.0	.5620-01	.7020-01	.7610-01	.9345	.4223-02	.3118-02	.5500	4.116	527.9
117	277.00	.30000	1347.0	.6510-01	.7980-01	.8580-01	.9345	.4761-02	.3612-02	.6910	5.297	513.1
118	277.00	.40000	1464.0	.4730-01	.5880-01	.6360-01	.9345	.3531-02	.2623-02	.4710	3.530	525.1
118	277.00	.60000	1466.0	.5940-01	.7400-01	.8010-01	.9345	.4446-02	.3298-02	.5900	4.418	525.8
118	277.00	.70000	1467.0	.6480-01	.8160-01	.8870-01	.9345	.4925-02	.3595-02	.6140	4.585	533.7
117	277.00	.75000	1348.0	.1057	.1351	.1479	.9345	.8209-02	.5865-02	.9480	7.041	542.7
117	277.00	.81500	1349.0	.9000-01	.1136	.1237	.9345	.6767-02	.4996-02	.8450	6.313	534.9
117	277.00	.83700	1350.0	.8640-01	.1092	.1189	.9345	.6601-02	.4798-02	.8100	6.042	535.4
117	277.00	.88400	1351.0	.9760-01	.1253	.1374	.9345	.7629-02	.5416-02	.8610	6.390	545.3
117	277.00	.89400	1352.0	.8270-01	.1056	.1155	.9345	.6415-02	.4590-02	.7440	5.533	542.1
118	277.00	.90000	1468.0	.7790-01	.1007	.1108	.9345	.6149-02	.4325-02	.6730	4.985	548.9
118	277.00	.90700	1353.0	.9360-01	.1216	.1340	.9345	.7439-02	.5196-02	.7950	5.881	551.5
118	277.00	.92100	1469.0	.9970-01	.1279	.1402	.9345	.7782-02	.5534-02	.8840	6.564	544.8
118	277.00	.93700	1471.0	.1081	.1420	.1573	.9345	.8733-02	.6002-02	.8850	6.533	557.0

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR08)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
118	335.00	.11000	1309.0	.1510	.1953	.2091	.9388	.1160-01	.8379-02	1.300	9.628	549.4
117	337.50	.74000	1355.0	.1259	.1665	.1850	.9345	.1027-01	.6990-02	1.010	7.437	559.8
117	337.50	.75000	1356.0	.1329	.1799	.2021	.9345	.1122-01	.7378-02	.9940	7.409	569.6
118	337.50	.76500	1357.0	.9730-01	.1236	.1349	.9345	.7487-02	.5401-02	.8940	6.771	538.9
118	337.50	.92500	1359.0	.7520-01	.1009	.1129	.9345	.6265-02	.4175-02	.5770	4.240	566.2
118	337.50	.93200	1360.0	.1018	.1388	.1564	.9345	.8682-02	.5649-02	.7460	5.463	572.4
118	337.50	.93900	1361.0	.1093	.1525	.1738	.9345	.9644-02	.6069-02	.7560	5.511	580.0

RIGHT SRB

PARAMETRIC DATA

ALPHA = 5.000 BETA = 5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
119	5.000	5.000	3.010	37.20	705.0	250.7	.9080	6.331	2335.	.3341-03	.2005-06	3.890
120	4.990	5.000	3.010	37.30	705.0	250.8	.9090	6.338	2336.	.3344-03	.2006-06	3.893

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
119	.5553-01	.9193-02
120	.5556-01	.9189-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
120	.00000	.80000-02	1310.0	.3060	.4122	.4481	.9384	.2490-01	.1700-01	2.326	17.84	568.3
119	.00000	.25000-01	1311.0	.2499	.3437	.3763	.9384	.2089-01	.1388-01	1.793	12.89	575.7
119	.00000	.83700	1364.0	.5880-01	.7760-01	.8620-01	.9345	.4788-02	.3262-02	.4730	3.482	560.1
119	.00000	.88400	1365.0	.5420-01	.7450-01	.8420-01	.9345	.4677-02	.3009-02	.3900	2.849	575.5
119	.00000	.90700	1366.0	.5590-01	.7740-01	.8780-01	.9345	.4876-02	.3105-02	.3950	2.882	577.9
119	5.0000	.75000-01	1313.0	.1558	.2053	.2220	.9382	.1232-01	.8653-02	1.266	9.028	558.7
119	20.000	.75000-01	1316.0	.8630-01	.1409	.1672	.9376	.9283-02	.4790-02	.4350	3.021	614.1
119	20.000	.10000+00	1318.0	.1499	.1965	.2129	.9376	.1182-01	.8321-02	1.236	9.121	556.4
119	20.000	.11000	1319.0	.1498	.1955	.2114	.9376	.1174-01	.8319-02	1.256	9.281	554.0
119	20.000	.95300	1432.0	.8130-01	.1097	.1197	.9380	.6647-02	.4512-02	.6140	4.502	568.9
120	22.500	.72400	1367.0	.1037	.1414	.1593	.9345	.8853-02	.5762-02	.7620	5.673	572.8
119	22.500	.74000	1368.0	.1321	.1839	.2094	.9345	.1163-01	.7334-02	.9170	6.690	579.9
119	22.500	.75000	1369.0	.1384	.2027	.2369	.9345	.1315-01	.7682-02	.8530	6.177	594.0
120	22.500	.76500	1370.0	.1260	.1677	.1868	.9345	.1038-01	.7002-02	.9940	7.434	563.2
120	22.500	.77100	1371.0	.1074	.1399	.1543	.9345	.8574-02	.5968-02	.9070	6.703	553.2
119	22.500	.92500	1372.0	.5430-01	.6990-01	.7680-01	.9345	.4263-02	.3013-02	.4750	3.520	547.4
119	22.500	.93900	1374.0	.6420-01	.8500-01	.9440-01	.9345	.5243-02	.3567-02	.5150	3.796	560.5
119	24.400	.95300	1433.0	.8650-01	.1182	.1297	.9379	.7203-02	.4806-02	.6320	4.627	573.4
119	35.000	.75000-01	1321.0	.1670	.2216	.2416	.9373	.1342-01	.9275-02	1.328	9.461	561.8
119	35.000	.11000	1322.0	.1540	.2007	.2175	.9373	.1208-01	.8549-02	1.293	9.719	553.7

1H72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR09)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
119	35.600	.95300	1434.0	.7620-01	.1006	.1092	.9377	.6065-02	.4231-02	.6150	4.530	559.7
119	40.000	.95300	1435.0	.6030-01	.7850-01	.8490-01	.9376	.4712-02	.3350-02	.5100	3.770	552.8
119	45.000	.74000	1375.0	.1690	.2377	.2719	.9345	.1510-01	.9385-02	1.146	8.485	582.9
119	45.000	.75000	1376.0	.2256	.3292	.3839	.9345	.2132-01	.1253-01	1.402	10.34	593.0
120	45.000	.76500	1377.0	.1654	.2232	.2503	.9345	.1391-01	.9190-02	1.251	9.177	569.0
120	45.000	.77100	1378.0	.1306	.1712	.1895	.9345	.1053-01	.7255-02	1.078	7.952	556.6
120	45.000	.81500	1379.0	.8530-01	.1103	.1213	.9345	.6742-02	.4741-02	.7380	5.463	549.5
120	45.000	.88400	1381.0	.5210-01	.6650-01	.7280-01	.9345	.4042-02	.2897-02	.4720	3.510	542.1
120	45.000	.90700	1382.0	.3210-01	.4050-01	.4410-01	.9345	.2448-02	.1786-02	.3050	2.278	534.2
119	65.000	.11000	1323.0	.2464	.3364	.3703	.9375	.2056-01	.1368-01	1.802	12.97	573.3
119	67.500	.74000	1383.0	.1855	.2615	.2995	.9345	.1663-01	.1030-01	1.249	9.247	583.7
119	67.500	.75000	1384.0	.1688	.2489	.2918	.9345	.1620-01	.9375-02	1.027	7.563	595.4
120	67.500	.77100	1385.0	.1092	.1427	.1577	.9345	.8761-02	.6065-02	.9100	6.723	555.0
119	76.000	.10000+00	1324.0	.2605	.3587	.3951	.9378	.2194-01	.1447-01	1.863	13.62	576.2
119	76.000	.14100	1386.0	.1732	.2403	.2730	.9345	.1516-01	.9619-02	1.215	8.867	578.7
119	76.000	.14800	1387.0	.1335	.1733	.1909	.9345	.1060-01	.7414-02	1.139	8.425	551.4
119	76.000	.15500	1388.0	.1004	.1286	.1408	.9345	.7820-02	.5578-02	.8980	6.671	543.9
119	76.000	.16200	1389.0	.7340-01	.9300-01	.1014	.9345	.5631-02	.4076-02	.6810	5.076	537.8
119	76.000	.25000	1390.0	.1080-01	.1330-01	.1440-01	.9345	.7973-03	.5996-03	.1120	.8540	518.8
119	77.500	.95300	1436.0	.4420-01	.5710-01	.6130-01	.9383	.3404-02	.2453-02	.3820	2.830	549.2
119	77.500	.99400	1439.0	.3570-01	.4700-01	.5070-01	.9383	.2818-02	.1980-02	.2900	2.136	558.6
120	90.000	.15000-01	1325.0	.3171	.4339	.4742	.9384	.2635-01	.1762-01	2.308	17.17	574.1
119	90.000	.25000-01	1326.0	.3602	.5390	.6089	.9384	.3381-01	.2000-01	2.126	15.11	598.7
120	90.000	.40000-01	1327.0	.2938	.4052	.4441	.9384	.2467-01	.1632-01	2.093	15.29	576.9
119	90.000	.60000-01	1328.0	.2387	.3209	.3488	.9384	.1937-01	.1325-01	1.822	12.54	567.5
119	90.000	.75000-01	1329.0	.1361	.1778	.1913	.9384	.1062-01	.7558-02	1.137	7.751	554.6
120	90.000	.13230	1479.0	.2987	.6274	.9523	.9345	.5291-01	.1660-01	1.117	7.919	637.8
120	90.000	.13390	1480.0	.2787	.5925	.9104	.9345	.5056-01	.1548-01	1.031	7.305	638.6
120	90.000	.13560	1481.0	.2415	.4313	.5703	.9345	.3169-01	.1342-01	1.075	7.666	625.0
120	90.000	.13730	1482.0	.2356	.3901	.4897	.9345	.2720-01	.1309-01	1.165	8.348	616.1
120	90.000	.13890	1483.0	.2232	.3427	.4109	.9345	.2283-01	.1240-01	1.254	9.038	604.0
120	90.000	.55000	1391.0	.1316	.1701	.1871	.9345	.1039-01	.7312-02	1.139	8.434	549.4
120	90.000	.65000	1392.0	.1099	.1444	.1600	.9345	.8890-02	.6105-02	.9000	6.637	557.7
119	90.000	.74000	1393.0	.2830-01	.3690-01	.4070-01	.9345	.2258-02	.1570-02	.2380	1.789	553.4
119	90.000	.76500	1394.0	.1613	.2173	.2435	.9345	.1352-01	.8954-02	1.224	8.981	568.3
119	90.000	.77100	1395.0	.1080	.1434	.1595	.9345	.8859-02	.5998-02	.8570	6.310	562.0
119	90.000	.81500	1396.0	.4290-01	.5530-01	.6070-01	.9345	.3373-02	.2385-02	.3760	2.834	547.3
119	90.000	.83700	1397.0	.7980-01	.1041	.1150	.9345	.6383-02	.4432-02	.6700	4.948	553.9
119	90.000	.88400	1398.0	.7840-01	.1024	.1132	.9345	.6285-02	.4353-02	.6540	4.830	554.8
119	90.000	.89400	1399.0	.7890-01	.9910-01	.1076	.9345	.5976-02	.4380-02	.7570	5.658	532.1
119	90.000	.90700	1400.0	.2860-01	.3690-01	.4050-01	.9345	.2251-02	.1588-02	.2490	1.845	548.2
119	90.000	.91700	1401.0	.4040-01	.5190-01	.5690-01	.9345	.3160-02	.2243-02	.3570	2.650	545.8
119	90.000	.93200	1402.0	.4150-01	.5370-01	.5910-01	.9345	.3282-02	.2305-02	.3570	2.646	549.9

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR09)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
119	90.000	.93900	1403.0	.3600-01	.4680-01	.5150-01	.9345	.2861-02	.2001-02	.3070	2.274	551.3
120	95.000	.13560	1484.0	.2648	.4743	.6284	.9345	.3491-01	.1471-01	1.175	8.379	625.3
120	95.000	.13730	1485.0	.2690	.4582	.5860	.9345	.3256-01	.1495-01	1.276	9.129	619.7
120	95.000	.13890	1486.0	.2731	.4627	.5895	.9345	.3275-01	.1517-01	1.306	9.344	619.1
120	95.000	.14560	1487.0	.2186	.3045	.3468	.9345	.1927-01	.1214-01	1.517	11.06	580.2
120	95.000	.14730	1488.0	.1902	.2534	.2825	.9345	.1570-01	.1057-01	1.495	10.99	563.7
119	104.00	.10000+00	1330.0	.3043	.4293	.4705	.9393	.2612-01	.1690-01	2.046	14.89	583.9
119	104.00	.12000	1404.0	.2911	.4650	.5708	.9345	.3169-01	.1616-01	1.523	10.94	610.7
119	104.00	.12700	1405.0	.2898	.4375	.5197	.9345	.2886-01	.1609-01	1.679	12.12	600.6
119	104.00	.13400	1406.0	.2748	.4710	.6048	.9345	.3358-01	.1526-01	1.292	9.235	620.3
119	104.00	.14800	1408.0	.1718	.2329	.2617	.9345	.1453-01	.9541-02	1.282	9.398	570.6
119	104.00	.15500	1409.0	.1887	.2598	.2941	.9345	.1633-01	.1048-01	1.349	9.860	576.2
119	104.00	.16200	1410.0	.1512	.2066	.2331	.9345	.1294-01	.8395-02	1.104	8.074	573.5
119	104.00	.17300	1411.0	.1041	.1356	.1496	.9345	.8306-02	.5779-02	.8770	6.485	553.2
119	104.00	.18000	1412.0	.8430-01	.1080	.1184	.9345	.6573-02	.4679-02	.7500	5.567	544.7
119	104.00	.18600	1413.0	.7380-01	.9370-01	.1023	.9345	.5682-02	.4096-02	.6780	5.045	539.5
119	104.00	.19300	1414.0	.5870-01	.7400-01	.8060-01	.9345	.4473-02	.3259-02	.6540	4.137	534.8
119	104.00	.20000	1415.0	.5600-01	.7060-01	.7680-01	.9345	.4265-02	.3107-02	.5280	3.941	534.9
119	104.00	.25000	1416.0	.5620-01	.7140-01	.7800-01	.9345	.4333-02	.3119-02	.5140	3.889	540.2
120	112.00	.13560	1489.0	.1998	.2785	.3172	.9345	.1762-01	.1110-01	1.386	10.11	580.3
120	112.00	.13730	1490.0	.2313	.3336	.3865	.9345	.2147-01	.1285-01	1.479	10.73	590.1
120	112.00	.13890	1491.0	.2487	.3632	.4235	.9345	.2353-01	.1382-01	1.547	11.21	593.2
120	112.00	.14560	1492.0	.2247	.3108	.3526	.9345	.1959-01	.1249-01	1.590	11.61	577.8
120	112.00	.14730	1493.0	.2032	.2902	.3346	.9345	.1859-01	.1129-01	1.329	9.654	587.5
119	112.50	.74000	1417.0	.1479	.2334	.2844	.9345	.1579-01	.8215-02	.7910	5.686	608.7
119	112.50	.75000	1418.0	.2060	.3909	.5416	.9345	.3007-01	.1144-01	.8530	6.067	630.4
120	112.50	.77100	1419.0	.1360	.1969	.2287	.9345	.1271-01	.7555-02	.8610	6.347	591.2
119	112.50	.92500	1420.0	.6770-01	.8680-01	.9510-01	.9345	.5282-02	.3758-02	.6010	4.464	544.9
119	112.50	.93200	1421.0	.6190-01	.8020-01	.8820-01	.9345	.4900-02	.3440-02	.5330	3.946	550.0
119	112.50	.93900	1422.0	.4960-01	.6420-01	.7070-01	.9345	.3926-02	.2752-02	.4250	3.146	550.5
119	112.50	.95300	1440.0	.5240-01	.6840-01	.7260-01	.9405	.4029-02	.2910-02	.4390	3.246	554.0
120	112.50	.96700	1441.0	.8430-01	.1087	.1150	.9405	.6387-02	.4681-02	.7350	5.444	548.2
120	112.50	.99400	1443.0	.6880-01	.9100-01	.9690-01	.9405	.5386-02	.3821-02	.5510	4.059	560.9
119	135.00	.25000-01	1332.0	.3818	.5821	.6335	.9423	.3517-01	.2120-01	2.172	15.66	602.5
120	135.00	.50000-01	1333.0	.3008	.4200	.4474	.9423	.2486-01	.1671-01	2.076	15.13	580.9
119	135.00	.75000-01	1334.0	.1637	.2187	.2307	.9423	.1281-01	.9091-02	1.274	9.520	564.8
119	135.00	.10000+00	1335.0	.1937	.2615	.2765	.9423	.1535-01	.1075-01	1.462	10.72	569.1
119	135.00	.40000	1423.0	.9890-01	.1304	.1447	.9345	.8037-02	.5490-02	.8000	5.995	559.3
120	135.00	.92500	1424.0	.5540-01	.7110-01	.7790-01	.9345	.4330-02	.3076-02	.4900	3.639	545.7
120	140.00	.13560	1494.0	.1264	.1688	.1883	.9345	.1046-01	.7025-02	.9880	7.261	564.5
120	140.00	.13730	1495.0	.1304	.1743	.1946	.9345	.1081-01	.7245-02	1.014	7.447	565.2
120	140.00	.13890	1496.0	.1476	.1971	.2200	.9345	.1222-01	.8198-02	1.150	8.451	564.8
120	140.00	.14560	1497.0	.1511	.2008	.2236	.9345	.1242-01	.8395-02	1.195	8.795	562.7

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR09)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
120	150.00	.14230	1499.0	.1313	.1734	.1924	.9346	.1069-01	.7296-02	1.061	7.815	559.7
120	180.00	.80000-02	1298.0	.3952	.5976	.6133	.9475	.3407-01	.2196-01	2.286	17.37	601.0
120	180.00	.15000-01	1299.0	.3366	.4725	.4823	.9475	.2679-01	.1870-01	2.293	16.43	582.5
119	180.00	.25000-01	1300.0	.5116	.7532	.7712	.9475	.4282-01	.2841-01	3.122	21.53	595.1
120	180.00	.50000-01	1301.0	.3250	.4526	.4616	.9475	.2565-01	.1806-01	2.258	15.68	580.1
119	180.00	.75000-01	1302.0	.2021	.2724	.2772	.9475	.1539-01	.1122-01	1.532	10.53	568.5
120	180.00	.10000+00	1303.0	.2319	.3236	.3301	.9475	.1834-01	.1288-01	1.603	11.69	580.7
119	225.00	.98000	1425.0	.1035	.1633	.1615	.9510	.8965-02	.5747-02	.5530	3.978	608.7
119	225.00	.99400	1426.0	.2980-01	.4470-01	.4430-01	.9510	.2459-02	.1653-02	.1740	1.260	599.5
119	263.00	.13600	1336.0	.7440-01	.9530-01	.1040	.9351	.5773-02	.4131-02	.6640	4.932	544.2
120	263.00	.20000	1472.0	.7980-01	.1008	.1094	.9351	.6080-02	.4432-02	.7480	5.573	536.4
120	263.00	.30000	1337.0	.7170-01	.9010-01	.9760-01	.9351	.5420-02	.3981-02	.6860	5.210	532.8
120	263.00	.40000	1473.0	.5510-01	.7040-01	.7670-01	.9351	.4263-02	.3060-02	.4960	3.684	543.1
120	263.00	.50000	1474.0	.5430-01	.6920-01	.7540-01	.9351	.4190-02	.3017-02	.4930	3.665	541.7
120	263.00	.60000	1475.0	.6530-01	.8400-01	.9180-01	.9351	.5098-02	.3630-02	.5760	4.276	546.3
120	263.00	.75000	1338.0	.9270-01	.1254	.1401	.9351	.7784-02	.5149-02	.6960	5.099	570.0
120	263.00	.81500	1339.0	.6650-01	.8550-01	.9350-01	.9351	.5195-02	.3695-02	.5850	4.338	546.8
120	263.00	.83700	1340.0	.5810-01	.7460-01	.8160-01	.9351	.4531-02	.3225-02	.5120	3.796	546.4
120	263.00	.88400	1341.0	.6470-01	.8630-01	.9580-01	.9351	.5322-02	.3597-02	.5080	3.733	564.0
120	263.00	.89400	1342.0	.1093	.1407	.1539	.9351	.8549-02	.6075-02	.9600	7.118	547.1
120	263.00	.92800	1477.0	.1141	.1533	.1707	.9351	.9481-02	.6341-02	.8760	6.428	567.0
119	263.00	.93900	1344.0	.1007	.1401	.1585	.9351	.8801-02	.5589-02	.7000	5.108	579.7
120	270.00	.80000-02	1304.0	.2708	.3627	.3689	.9475	.2050-01	.1304-01	2.093	16.47	566.0
120	270.00	.50000-01	1306.0	.2741	.3726	.3794	.9475	.2108-01	.1523-01	2.030	14.16	571.8
119	270.00	.75000-01	1307.0	.1822	.2425	.2465	.9475	.1369-01	.1012-01	1.436	10.06	563.1
120	270.00	.10000+00	1308.0	.2005	.2737	.2787	.9475	.1549-01	.1114-01	1.470	10.75	573.2
119	270.00	.11500	1345.0	.1564	.2148	.2418	.9350	.1343-01	.8686-02	1.127	8.241	575.2
119	277.00	.13600	1346.0	.7110-01	.9040-01	.9860-01	.9349	.5474-02	.3946-02	.6490	4.827	540.5
119	277.00	.30000	1347.0	.7330-01	.9130-01	.9860-01	.9349	.5477-02	.4069-02	.7260	5.534	526.5
120	277.00	.40000	1464.0	.5210-01	.6580-01	.7150-01	.9349	.3971-02	.2895-02	.4910	3.660	535.6
120	277.00	.60000	1466.0	.6590-01	.8310-01	.9030-01	.9349	.5015-02	.3662-02	.6240	4.653	534.8
120	277.00	.70000	1467.0	.7900-01	.9990-01	.1086	.9349	.6036-02	.4390-02	.7390	5.511	536.7
119	277.00	.75000	1348.0	.1011	.1315	.1446	.9349	.8028-02	.5616-02	.8580	6.346	552.2
119	277.00	.81500	1349.0	.9580-01	.1217	.1325	.9349	.7358-02	.5318-02	.8810	6.557	539.3
119	277.00	.83700	1350.0	.9380-01	.1192	.1298	.9349	.7210-02	.5209-02	.8620	6.415	539.5
119	277.00	.88400	1351.0	.9910-01	.1288	.1417	.9349	.7866-02	.5504-02	.8420	6.226	552.0
119	277.00	.89400	1352.0	.1040	.1334	.1459	.9349	.8102-02	.5774-02	.9230	6.847	545.2
120	277.00	.90000	1468.0	.1086	.1397	.1529	.9349	.8497-02	.6033-02	.9550	7.083	546.8
120	277.00	.90700	1353.0	.1118	.1448	.1589	.9349	.8831-02	.6212-02	.9620	7.123	550.2
120	277.00	.92100	1469.0	.1258	.1618	.1772	.9349	.9845-02	.6991-02	1.108	8.215	546.7
120	277.00	.92800	1470.0	.1209	.1579	.1740	.9349	.9666-02	.6719-02	1.012	7.475	554.5
120	277.00	.93700	1471.0	.1177	.1559	.1729	.9349	.9604-02	.6541-02	.9420	6.933	561.1
120	335.00	.11000	1309.0	.1727	.2280	.2433	.9403	.1351-01	.9593-02	1.393	10.26	559.9

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, RIGHT SRB

(RVZR09)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HI/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
119	337.50	.74000	1355.0	.1077	.1457	.1636	.9345	.9082-02	.5980-02	.8090	5.927	569.8
119	337.50	.75000	1356.0	.1194	.1682	.1926	.9345	.1069-01	.6631-02	.8860	5.966	583.5
120	337.50	.76500	1357.0	.1153	.1481	.1624	.9345	.9025-02	.6404-02	1.018	7.682	546.1
120	337.50	.92500	1359.0	.1270	.1727	.1943	.9345	.1079-01	.7057-02	.9420	6.895	571.7
120	337.50	.93200	1360.0	.1489	.2061	.2340	.9345	.1300-01	.8272-02	1.051	7.670	578.1
120	337.50	.93900	1361.0	.2247	.3218	.3716	.9345	.2065-01	.1248-01	1.458	10.59	588.3

RIGHT SRB

PARAMETRIC DATA

ALPHA = -5.000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
103	-5.010	-8.900	4.020	72.70	739.0	174.6	.4660	5.277	2603.	.2242-03	.1405-06	4.152
104	-5.000	-8.900	4.020	72.80	739.0	174.5	.4670	5.279	2602.	.2243-03	.1405-06	4.154

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
103	.5106-01	.1130-01
104	.5107-01	.1130-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
104	.00000	.25000-01	1311.0	.2520	.3471	.3834	.9375	.1958-01	.1287-01	1.735	12.30	603.9
104	.00000	.76500	1362.0	.1153	.1443	.1672	.9228	.8537-02	.5887-02	1.081	8.119	555.0
104	.00000	.83700	1364.0	.1290-01	.1600-01	.1850-01	.9228	.9426-03	.6590-03	.1250	.9250	549.1
104	.00000	.88400	1365.0	.1660-01	.2090-01	.2440-01	.9228	.1247-02	.8479-03	.1510	1.113	560.5
104	.00000	.90700	1366.0	.2190-01	.2740-01	.3180-01	.9228	.1622-02	.1120-02	.2070	1.527	554.2
104	5.0000	.75000-01	1313.0	.1204	.1575	.1696	.9335	.8659-02	.6150-02	.9640	6.800	581.9
104	15.600	.95300	1431.0	.1178	.1476	.1544	.9414	.7883-02	.6017-02	1.100	8.124	555.8
104	20.000	.75000-01	1316.0	.1338	.1758	.1860	.9413	.9498-02	.6835-02	1.058	7.453	583.9
104	20.000	.10000+00	1318.0	.1577	.2065	.2183	.9413	.1115-01	.8052-02	1.258	9.164	582.4
104	20.000	.11000	1319.0	.1706	.2226	.2351	.9413	.1200-01	.8714-02	1.379	10.06	580.4
104	20.000	.95300	1432.0	.1084	.1350	.1404	.9422	.7172-02	.5535-02	1.036	7.662	551.6
103	22.500	.72400	1367.0	.9300-01	.1183	.1378	.9241	.7037-02	.4747-02	.8180	6.110	566.4
104	22.500	.74000	1368.0	.1505	.1949	.2301	.9241	.1175-01	.7687-02	1.246	9.104	576.6
104	22.500	.75000	1369.0	.1825	.2476	.3037	9241	.1551-01	.9322-02	1.311	9.474	598.1
103	22.500	.76500	1370.0	.1140	.1433	.1653	.9241	.8441-02	.5821-02	1.052	7.885	558.1
103	22.500	.77100	1371.0	.7040-01	.8700-01	.9920-01	.9241	.5067-02	.3593-02	.6930	5.138	546.0
104	22.500	.92500	1372.0	.4280-01	.5240-01	.5930-01	.9241	.3030-02	.2187-02	.4410	3.288	537.0
104	22.500	.93900	1374.0	.6930-01	.8540-01	.9700-01	.9241	.4956-02	.3539-02	.6940	5.160	542.5
104	24.400	.95300	1433.0	.1305	1631	.1690	.9429	.8632-02	.6667-02	1.235	9.124	553.5
104	35.000	.75000-01	1321.0	.1498	.1979	.2066	.9434	.1055-01	.7648-02	1.161	8.166	586.9

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR10)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
104	35.000	.11000	1322.0	.1521	.1964	.2042	.9434	.1043-01	.7767-02	1.271	9.453	575.0
104	35.600	.95300	1434.0	.1259	.1561	.1604	.9445	.8191-02	.6429-02	1.226	9.083	548.0
104	40.000	.95300	1435.0	.1137	.1406	.1440	.9450	.7355-02	.5804-02	1.119	8.305	545.8
104	45.000	.74000	1375.0	.1264	.1652	.1951	.9251	.9964-02	.6454-02	1.014	7.512	581.6
103	45.000	.75000	1376.0	.1678	.2309	.2841	.9251	.1451-01	.8571-02	1.158	8.494	603.5
103	45.000	.76500	1377.0	.1078	.1402	.1649	.9251	.8422-02	.5503-02	.8780	6.409	579.1
103	45.000	.77100	1378.0	.9220-01	.1174	.1358	.9251	.6934-02	.4709-02	.8120	5.961	566.4
103	45.000	.81500	1379.0	.2960-01	.3630-01	.4090-01	.9251	.2087-02	.1509-02	.3010	2.242	539.2
103	45.000	.88400	1381.0	.3800-01	.4670-01	.5270-01	.9251	.2692-02	.1941-02	.3850	2.865	540.4
103	45.000	.90700	1382.0	.4710-01	.5750-01	.6460-01	.9251	.3298-02	.2406-02	.4920	3.671	534.3
104	65.000	.11000	1323.0	.1266	.1659	.1712	.9450	.8745-02	.6464-02	1.007	7.215	582.9
104	67.500	.74000	1383.0	.1392	.1842	.2192	.9253	.1119-01	.7110-02	1.075	7.945	587.5
104	67.500	.75000	1384.0	.1529	.2142	.2671	.9253	.1364-01	.7806-02	1.007	7.359	609.7
103	67.500	.77100	1385.0	.1292	.1662	.1935	.9253	.9881-02	.6598-02	1.096	8.019	572.7
104	76.000	.10000+00	1324.0	.1634	.2154	.2233	.9445	.1140-01	.8345-02	1.276	9.280	585.8
104	76.000	.14100	1386.0	.1936	.2496	.2916	.9251	.1489-01	.9888-02	1.628	11.91	574.1
104	76.000	.14800	1387.0	.1271	.1578	.1794	.9251	.9160-02	.6488-02	1.230	9.114	549.0
104	76.000	.15500	1388.0	.8240-01	.1012	.1141	.9251	.5827-02	.4206-02	.8360	6.223	539.9
104	76.000	.16200	1389.0	.6440-01	.7880-01	.8870-01	.9251	.4531-02	.3288-02	.6630	4.939	537.1
104	76.000	.25000	1390.0	.3130-01	.3770-01	.4200-01	.9251	.2144-02	.1597-02	.3470	2.647	521.7
104	77.500	.95300	1436.0	.3420-01	.4200-01	.4290-01	.9454	.2189-02	.1744-02	.3460	2.575	540.3
104	77.500	.99400	1439.0	.7310-01	.9110-01	.9320-01	.9454	.4759-02	.3732-02	.6990	5.168	551.5
103	90.000	.15000-01	1325.0	.2886	.3937	.4145	.9431	.2117-01	.1473-01	2.039	14.97	600.4
104	90.000	.25000-01	1326.0	.2286	.3185	.3369	.9431	.1721-01	.1167-01	1.527	10.81	607.8
103	90.000	.40000-01	1327.0	.1735	.2312	.2424	.9431	.1238-01	.8859-02	1.311	9.510	590.8
104	90.000	.60000-01	1328.0	.1502	.1952	.2037	.9431	.1040-01	.7669-02	1.227	8.397	578.6
104	90.000	.75000-01	1329.0	.7820-01	.9880-01	.1025	.9431	.5235-02	.3994-02	.7090	4.815	561.3
103	90.000	.13230	1479.0	.2411	.4259	.6978	.9246	.3563-01	.1231-01	1.048	7.372	653.6
103	90.000	.13390	1480.0	.2514	.4687	.8360	.9246	.4269-01	.1283-01	1.022	7.175	659.1
103	90.000	.13560	1481.0	.2759	.4337	.6116	.9246	.3123-01	.1409-01	1.430	10.14	637.3
103	90.000	.13730	1482.0	.2350	.3209	.3941	.9246	.2012-01	.1200-01	1.655	11.95	600.8
103	90.000	.13890	1483.0	.1338	.1711	.1994	.9246	.1018-01	.6830-02	1.157	8.481	569.4
103	90.000	.55000	1391.0	.4880-01	.5960-01	.6720-01	.9246	.3432-02	.2491-02	.5060	3.775	535.5
103	90.000	.65000	1392.0	.3800-01	.4640-01	.5230-01	.9246	.2672-02	.1938-02	.3930	2.934	535.8
104	90.000	.74000	1393.0	.1590-01	.1970-01	.2250-01	.9246	.1147-02	.8101-03	.1540	1.159	548.8
104	90.000	.76500	1394.0	.1295	.1609	.1835	.9246	.9373-02	.6615-02	1.252	9.275	549.3
104	90.000	.77100	1395.0	.7150-01	.8830-01	.1003	.9246	.5123-02	.3654-02	.7100	5.270	544.4
104	90.000	.81500	1396.0	.2870-01	.3520-01	.3980-01	.9246	.2034-02	.1464-02	.2910	2.204	539.8
104	90.000	.83700	1397.0	.2470-01	.3040-01	.3440-01	.9246	.1754-02	.1261-02	.2500	1.859	540.6
104	90.000	.88400	1398.0	.1680-01	.2060-01	.2330-01	.9246	.1191-02	.8579-03	.1710	1.272	539.5
104	90.000	.89400	1399.0	.3820-01	.4660-01	.5240-01	.9246	.2676-02	.1950-02	.4000	2.989	533.4
104	90.000	.90700	1400.0	.2160-01	.2640-01	.2980-01	.9246	.1521-02	.1105-02	.2250	1.681	534.9
104	90.000	.91700	1401.0	.2380-01	.2900-01	.3270-01	.9246	.1668-02	.1215-02	.2490	1.860	533.5

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR10)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
104	90.000	.93200	1402.0	.2220-01	.2720-01	.3070-01	.9246	.1570-02	.1134-02	.2280	1.697	537.8
104	90.000	.93900	1403.0	.2490-01	.3050-01	.3450-01	.9246	.1761-02	.1270-02	.2540	1.890	538.8
103	95.000	.13560	1484.0	.2092	.3156	.4272	.9243	.2181-01	.1068-01	1.170	8.329	629.2
103	95.000	.13730	1485.0	.1738	.2385	.2948	.9243	.1505-01	.8875-02	1.209	8.720	602.5
103	95.000	.13890	1486.0	.1130	.1490	.1782	.9243	.9098-02	.5771-02	.8820	6.416	585.9
103	95.000	.14560	1487.0	.1140	.1427	.1639	.9243	.8367-02	.5820-02	1.069	7.893	555.1
103	95.000	.14730	1488.0	.8560-01	.1053	.1193	.9243	.6093-02	.4373-02	.8660	6.441	540.7
104	104.00	.10000+00	1330.0	.6620-01	.8680-01	.9200-01	.9409	.4700-02	.3379-02	.5250	3.823	583.3
104	104.00	.12000	1404.0	.2242	.3270	.4306	.9238	.2199-01	.1145-01	1.344	9.605	621.3
104	104.00	.12700	1405.0	.2213	.3089	.3896	.9238	.1990-01	.1130-01	1.473	10.59	608.4
104	104.00	.13400	1406.0	.2039	.2892	.3702	.9238	.1891-01	.1042-01	1.305	9.364	613.4
104	104.00	.14100	1407.0	.1203	.1617	.1973	.9238	.1008-01	.6145-02	.8860	6.419	594.4
104	104.00	.14800	1408.0	.9590-01	.1181	.1344	.9238	.6862-02	.4898-02	.9630	7.161	542.0
104	104.00	.15500	1409.0	.5110-01	.6290-01	.7160-01	.9238	.3654-02	.2607-02	.5120	3.806	542.3
104	104.00	.16200	1410.0	.3540-01	.4360-01	.4970-01	.9238	.2537-02	.1806-02	.3530	2.620	543.4
104	104.00	.17300	1411.0	.4640-01	.5670-01	.6420-01	.9238	.3279-02	.2368-02	.4790	3.573	536.3
104	104.00	.18000	1412.0	.5020-01	.6130-01	.6930-01	.9238	.3538-02	.2566-02	.5260	3.923	533.9
104	104.00	.18600	1413.0	.4880-01	.5950-01	.6710-01	.9238	.3428-02	.2494-02	.5150	3.846	532.2
104	104.00	.19300	1414.0	.4030-01	.4900-01	.5530-01	.9238	.2825-02	.2057-02	.4260	3.180	531.8
104	104.00	.20000	1415.0	.2870-01	.3490-01	.3930-01	.9238	.2009-02	.1465-02	.3050	2.277	530.8
104	104.00	.25000	1416.0	.1410-01	.1710-01	.1930-01	.9238	.9853-03	.7217-03	.1520	1.156	528.3
103	112.00	.13560	1489.0	.8300-01	.1056	.1235	.9234	.6308-02	.4239-02	.7320	5.374	566.1
103	112.00	.13730	1490.0	.7210-01	.9330-01	.1106	.9234	.5646-02	.3681-02	.5990	4.377	576.0
103	112.00	.13890	1491.0	.7540-01	.9880-01	.1183	.9234	.6039-02	.3852-02	.6020	4.386	582.4
103	112.00	.14560	1492.0	.9940-01	.1247	.1443	.9234	.7368-02	.5074-02	.9230	6.808	556.9
103	112.00	.14730	1493.0	.3320-01	.4150-01	.4780-01	.9234	.2443-02	.1693-02	.3130	2.309	554.2
104	112.50	.74000	1417.0	.1149	.1467	.1721	.9233	.8792-02	.5869-02	1.000	7.335	568.3
104	112.50	.75000	1418.0	.1274	.1657	.1973	.9233	.1008-01	.6505-02	1.039	7.585	578.9
103	112.50	.77100	1419.0	.4880-01	.6080-01	.7000-01	.9233	.3574-02	.2491-02	.4650	3.501	551.9
104	112.50	.92500	1420.0	.3070-01	.3740-01	.4240-01	.9233	.2165-02	.1569-02	.3230	2.413	532.8
104	112.50	.93200	1421.0	.2690-01	.3290-01	.3740-01	.9233	.1909-02	.1375-02	.2780	2.076	536.2
104	112.50	.93900	1422.0	.2820-01	.3450-01	.3920-01	.9233	.2000-02	.1440-02	.2910	2.168	536.6
104	112.50	.95300	1440.0	.3100-01	.3800-01	.3970-01	.9402	.2029-02	.1583-02	.3180	2.370	537.8
103	112.50	.96700	1441.0	.4620-01	.5630-01	.5880-01	.9402	.3000-02	.2361-02	.4900	3.659	531.4
103	112.50	.99400	1443.0	.3420-01	.4220-01	.4430-01	.9402	.2262-02	.1745-02	.3370	2.504	545.4
103	135.00	.80000-02	1331.0	.2624	.3683	.4199	.9348	.2144-01	.1340-01	1.720	13.01	610.3
104	135.00	.25000-01	1332.0	.1618	.2212	.2490	.9348	.1272-01	.8264-02	1.136	8.203	601.1
103	135.00	.50000-01	1333.0	.1179	.1542	.1701	.9348	.8685-02	.6020-02	.9450	6.889	581.7
104	135.00	.75000-01	1334.0	.2760-01	.3490-01	.3790-01	.9348	.1936-02	.1409-02	.2490	1.865	561.8
104	135.00	.10000+00	1335.0	.4460-01	.5650-01	.6150-01	.9348	.3141-02	.2279-02	.4000	2.940	563.2
104	135.00	.40000	1423.0	.2390-01	.2930-01	.3350-01	.9223	.1709-02	.1219-02	.2440	1.848	538.5
103	135.00	.92500	1424.0	.4140-01	.5040-01	.5740-01	.9223	.2932-02	.2113-02	.4340	3.243	533.2
103	140.00	.13560	1494.0	.3320-01	.4100-01	.4720-01	.9221	.2410-02	.1694-02	.3280	2.432	545.3

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR10)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
103	140.00	.13730	1495.0	.3460-01	.4290-01	.4940-01	.9221	.2523-02	.1768-02	.3400	2.521	546.5
103	140.00	.13890	1496.0	.4270-01	.5270-01	.6070-01	.9221	.3101-02	.2178-02	.4210	3.124	545.5
103	140.00	.14560	1497.0	.4460-01	.5480-01	.6290-01	.9221	.3214-02	.2275-02	.4480	3.331	541.8
103	150.00	.14230	1499.0	.4170-01	.5130-01	.5880-01	.9220	.3003-02	.2131-02	.4230	3.147	540.3
103	180.00	.80000-02	1298.0	.2270	.3179	.3889	.9272	.1986-01	.1159-01	1.497	11.32	609.6
103	180.00	.15000-01	1299.0	.1487	.1952	.2276	.9272	.1162-01	.7591-02	1.177	8.426	583.7
104	180.00	.25000-01	1300.0	.1554	.2052	.2403	.9272	.1227-01	.7935-02	1.207	8.358	586.5
103	180.00	.50000-01	1301.0	.8530-01	.1098	.1264	.9272	.6453-02	.4354-02	.7200	5.015	573.5
104	180.00	.75000-01	1302.0	.1980-01	.2510-01	.2850-01	.9272	.1454-02	.1013-02	.1800	1.239	561.4
103	180.00	.10000+00	1303.0	.4770-01	.6100-01	.6990-01	.9272	.3571-02	.2436-02	.4120	3.021	569.6
104	225.00	.98000	1425.0	.8750-01	.1134	.1335	.9245	.6816-02	.4469-02	.7240	5.288	576.7
104	225.00	.99400	1426.0	.6350-01	.8200-01	.9630-01	.9245	.4917-02	.3245-02	.5320	3.892	574.7
104	263.00	.13600	1336.0	.1780-01	.2180-01	.2490-01	.9220	.1270-02	.9115-03	.1860	1.387	534.7
103	263.00	.20000	1472.0	.1800-01	.2170-01	.2450-01	.9220	.1254-02	.9182-03	.1980	1.484	523.3
103	263.00	.30000	1337.0	.2040-01	.2460-01	.2780-01	.9220	.1419-02	.1043-02	.2270	1.732	521.3
103	263.00	.40000	1473.0	.1920-01	.2330-01	.2650-01	.9220	.1352-02	.9807-03	.2060	1.539	529.1
103	263.00	.50000	1474.0	.1380-01	.1670-01	.1900-01	.9220	.9692-03	.7055-03	.1490	1.120	526.9
103	263.00	.60000	1475.0	.1910-01	.2310-01	.2620-01	.9220	.1336-02	.9746-03	.2070	1.555	525.9
103	263.00	.75000	1338.0	.3630-01	.4510-01	.5220-01	.9220	.2664-02	.1854-02	.3510	2.603	549.2
103	263.00	.81500	1339.0	.3860-01	.4700-01	.5360-01	.9220	.2737-02	.1971-02	.4060	3.031	532.8
103	263.00	.83700	1340.0	.2860-01	.3470-01	.3950-01	.9220	.2017-02	.1461-02	.3050	2.283	529.8
103	263.00	.88400	1341.0	.1980-01	.2450-01	.2820-01	.9220	.1442-02	.1009-02	.1940	1.435	546.9
103	263.00	.89400	1342.0	.5290-01	.6450-01	.7350-01	.9220	.3752-02	.2699-02	.5550	4.141	533.3
103	263.00	.92800	1477.0	.3170-01	.3910-01	.4490-01	.9220	.2293-02	.1618-02	.3160	2.351	543.1
104	263.00	.93900	1344.0	.3320-01	.4170-01	.4860-01	.9220	.2483-02	.1698-02	.3090	2.283	556.5
103	270.00	.80000-02	1304.0	.1906	.2458	.2882	.9246	.1472-01	.9733-02	1.600	12.54	574.3
103	270.00	.50000-01	1306.0	.1025	.1320	.1546	.9246	.7893-02	.5233-02	.8650	6.027	573.5
104	270.00	.75000-01	1307.0	.3770-01	.4780-01	.5530-01	.9246	.2825-02	.1927-02	.3370	2.364	563.5
103	270.00	.10000+00	1308.0	.6670-01	.8500-01	.9880-01	.9246	.5044-02	.3406-02	.5840	4.286	567.3
104	270.00	.11500	1345.0	.6160-01	.7730-01	.9030-01	.9220	.4612-02	.3143-02	.5690	4.194	557.8
104	277.00	.13600	1346.0	.2070-01	.2530-01	.2880-01	.9220	.1473-02	.1059-02	.2170	1.624	533.4
104	277.00	.30000	1347.0	.2230-01	.2680-01	.3030-01	.9220	.1547-02	.1138-02	.2480	1.893	521.0
103	277.00	.40000	1464.0	.1390-01	.1680-01	.1900-01	.9220	.9714-03	.7073-03	.1500	1.123	526.8
103	277.00	.60000	1466.0	.1570-01	.1910-01	.2170-01	.9220	.1107-02	.8039-03	.1690	1.265	528.5
103	277.00	.70000	1467.0	.2180-01	.2660-01	.3030-01	.9220	.1549-02	.1112-02	.2270	1.694	534.5
104	277.00	.75000	1348.0	.2580-01	.3230-01	.3760-01	.9220	.1922-02	.1318-02	.2420	1.786	555.3
104	277.00	.81500	1349.0	.2910-01	.3570-01	.4080-01	.9220	.2083-02	.1488-02	.3000	2.236	537.0
104	277.00	.83700	1350.0	.2480-01	.3040-01	.3480-01	.9220	.1776-02	.1269-02	.2560	1.908	536.9
103	277.00	.90000	1468.0	.2100-01	.2590-01	.2970-01	.9220	.1518-02	.1070-02	.2090	1.553	543.5
103	277.00	.90700	1353.0	.1140-01	.1420-01	.1640-01	.9220	.8359-03	.5829-03	.1110	.8220	548.4
103	277.00	.92100	1469.0	.2700-01	.3310-01	.3790-01	.9220	.1933-02	.1376-02	.2750	2.050	538.7
103	277.00	.92800	1470.0	.2340-01	.2890-01	.3330-01	.9220	.1703-02	.1194-02	.2300	1.709	545.8
103	277.00	.93700	1471.0	.2930-01	.3640-01	.4220-01	.9220	.2153-02	.1494-02	.2810	2.079	550.7

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

(RVZR10)

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
104	277.00	.93900	1354.0	.1970-01	.2480-01	.2910-01	.9220	.1485-02	.1004-02	.1780	1.314	560.9
103	335.00	.11000	1309.0	.1313	.1707	.1908	.9324	.9742-02	.6706-02	1.074	7.838	578.6
104	337.50	.74000	1355.0	.1366	.1735	.2043	.9220	.1044-01	.6976-02	1.212	8.903	565.0
104	337.50	.75000	1356.0	.1900	.2470	.2967	.9220	.1515-01	.9704-02	1.554	11.53	578.6
103	337.50	.76500	1357.0	.7530-01	.9200-01	.1050	.9220	.5359-02	.3843-02	.7830	5.936	535.1
103	337.50	.92500	1359.0	.3710-01	.4600-01	.5310-01	.9220	.2710-02	.1895-02	.3630	2.690	547.3
103	337.50	.93200	1360.0	.4450-01	.5560-01	.6470-01	.9220	.3304-02	.2271-02	.4180	3.090	554.6
103	337.50	.93900	1361.0	.2930-01	.3700-01	.4330-01	.9220	.2209-02	.1498-02	.2680	1.976	559.7

RIGHT SRB

PARAMETRIC DATA

ALPHA = -5.000 BETA = -5.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
107	-4.980	-5.000	4.020	72.70	739.0	174.5	.4660	5.272	2602.	.2240-03	.1405-06	4.149
108	-4.980	-5.000	4.020	72.80	735.0	173.6	.4670	5.279	2595.	.2256-03	.1397-06	4.189

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
107	.5104-01	.1131-01
108	.5103-01	.1126-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
107	.00000	.25000-01	1311.0	.2959	.4150	.4606	.9377	.2351-01	.1510-01	1.944	13.75	609.9
107	.00000	.76500	1362.0	.1167	.1473	.1717	.9228	.8764-02	.5958-02	1.061	7.948	560.6
107	.00000	.83700	1364.0	.3390-01	.4240-01	.4900-01	.9228	.2503-02	.1729-02	.3180	2.352	554.4
107	.00000	.88400	1365.0	.2750-01	.3510-01	.4130-01	.9228	.2107-02	.1403-02	.2390	1.756	568.1
107	.00000	.90700	1366.0	.2090-01	.2650-01	.3110-01	.9228	.1585-02	.1065-02	.1850	1.362	564.7
107	5.0000	.75000-01	1313.0	.1470	.1922	.2072	.9382	.1058-01	.7501-02	1.177	8.299	581.8
107	15.600	.95300	1431.0	.9480-01	.1209	.1279	.9401	.6527-02	.4837-02	.8260	6.061	567.9
107	20.000	.75000-01	1316.0	.1600	.2100	.2247	.9396	.1147-01	.8164-02	1.265	8.912	583.7
107	20.000	.10000+00	1318.0	.1730	.2264	.2420	.9396	.1235-01	.8830-02	1.382	10.07	582.1
107	20.000	.11000	1319.0	.1838	.2399	.2561	.9396	.1307-01	.9383-02	1.484	10.82	580.5
107	20.000	.95300	1432.0	.6670-01	.8410-01	.8860-01	.9405	.4520-02	.3402-02	.6050	4.452	560.9
108	22.500	.72400	1367.0	.1205	.1547	.1822	.9234	.9297-02	.6147-02	1.021	7.617	568.4
107	22.500	.74000	1368.0	.1268	.1655	.1976	.9234	.1008-01	.6469-02	1.021	7.447	580.8
107	22.500	.75000	1369.0	.1348	.1848	.2303	.9234	.1175-01	.6882-02	.9400	6.780	602.1
108	22.500	.76500	1370.0	.1570	.1993	.2327	.9234	.1188-01	.8010-02	1.385	10.37	561.6
108	22.500	.77100	1371.0	.1403	.1755	.2026	.9234	.1034-01	.7161-02	1.312	9.704	551.3
107	22.500	.92500	1372.0	.2840-01	.3500-01	.3990-01	.9234	.2035-02	.1452-02	.2870	2.132	541.2
107	22.500	.93900	1374.0	.4140-01	.5150-01	.5910-01	.9234	.3019-02	.2115-02	.4000	2.963	549.5
107	24.400	.95300	1433.0	.6230-01	.7880-01	.8280-01	.9408	.4228-02	.3178-02	.5600	4.119	562.5
107	35.000	.75000-01	1321.0	.1720	.2276	.2427	.9404	.1239-01	.8777-02	1.327	9.331	587.5

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR11)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
107	35.000	.11000	1322.0	.1548	.1996	.2114	.9404	.1079-01	.7902-02	1.300	9.674	574.1
107	35.600	.95300	1434.0	.5830-01	.7250-01	.7580-01	.9413	.3868-02	.2973-02	.5570	4.122	551.3
107	40.000	.95300	1435.0	.5510-01	.6830-01	.7120-01	.9414	.3634-02	.2813-02	.5390	3.995	547.1
107	45.000	.74000	1375.0	.1539	.2023	.2425	.9236	.1238-01	.7856-02	1.214	8.984	584.2
107	45.000	.75000	1376.0	.1734	.2384	.2972	.9236	.1517-01	.8852-02	1.200	8.796	603.2
108	45.000	.76500	1377.0	.2332	.3036	.3611	.9236	.1843-01	.1190-01	1.884	13.76	576.2
108	45.000	.77100	1378.0	.2810	.3659	.4353	.9236	.2221-01	.1434-01	2.269	16.58	576.3
108	45.000	.81500	1379.0	.5930-01	.7330-01	.8380-01	.9236	.4275-02	.3024-02	.5800	4.307	542.8
108	45.000	.88400	1381.0	.1530-01	.1880-01	.2140-01	.9236	.1091-02	.7824-03	.1550	1.157	536.2
108	45.000	.90700	1382.0	.3980-01	.4870-01	.5520-01	.9236	.2818-02	.2031-02	.4080	3.050	533.4
107	65.000	.11000	1323.0	.1634	.2170	.2324	.9399	.1186-01	.8337-02	1.246	8.898	589.2
107	67.500	.74000	1383.0	.1926	.2572	.3133	.9234	.1599-01	.9828-02	1.443	10.64	591.8
107	67.500	.75000	1384.0	.3940	.5739	.7583	.9234	.3870-01	.2011-01	2.369	17.22	620.9
108	67.500	.77100	1385.0	.1921	.2446	.2863	.9234	.1461-01	.9803-02	1.677	12.33	563.4
107	76.000	.10000+00	1324.0	.1776	.2372	.2559	.9391	.1306-01	.9065-02	1.333	9.666	591.6
107	76.000	.14100	1386.0	.2033	.2673	.3215	.9232	.1641-01	.1037-01	1.600	11.65	584.4
107	76.000	.14800	1387.0	.1410	.1767	.2043	.9232	.1043-01	.7198-02	1.318	9.734	555.5
107	76.000	.15500	1388.0	.8780-01	.1085	.1242	.9232	.6339-02	.4480-02	.8670	6.432	545.2
107	76.000	.16200	1389.0	.8090-01	.9960-01	.1137	.9232	.5801-02	.4131-02	.8140	6.056	541.5
107	76.000	.25000	1390.0	.2540-01	.3050-01	.3430-01	.9232	.1749-02	.1294-02	.2830	2.159	520.4
107	77.500	.95300	1436.0	.2880-01	.3540-01	.3710-01	.9399	.1892-02	.1469-02	.2910	2.169	540.2
107	77.500	.99400	1439.0	.4580-01	.5710-01	.6010-01	.9399	.3070-02	.2337-02	.4350	3.214	552.7
108	90.000	.15000-01	1325.0	.2972	.4085	.4500	.9377	.2297-01	.1517-01	2.044	15.01	599.7
107	90.000	.25000-01	1326.0	.2652	.3871	.4365	.9377	.2228-01	.1354-01	1.588	11.16	621.4
108	90.000	.40000-01	1327.0	.2254	.3023	.3301	.9377	.1684-01	.1150-01	1.660	12.04	590.2
107	90.000	.60000-01	1328.0	.1545	.2035	.2207	.9377	.1126-01	.7886-02	1.210	8.255	585.2
107	90.000	.75000-01	1329.0	.7230-01	.9170-01	.9820-01	.9377	.5014-02	.3692-02	.6440	4.372	564.1
108	90.000	.13230	1479.0	.3605	.6568	1.187	.9228	.6059-01	.1840-01	1.498	10.54	653.1
108	90.000	.13390	1480.0	.3737	.7451	1.620	.9228	.8268-01	.1907-01	1.405	9.855	660.8
108	90.000	.13560	1481.0	.3299	.5342	.8055	.9228	.4110-01	.1683-01	1.616	11.46	638.5
108	90.000	.13730	1482.0	.2182	.3024	.3827	.9228	.1953-01	.1114-01	1.469	10.60	602.6
108	90.000	.13890	1483.0	.1416	.1829	.2173	.9228	.1109-01	.7226-02	1.176	8.615	571.7
108	90.000	.55000	1391.0	.6130-01	.7570-01	.8670-01	.9228	.4422-02	.3130-02	.6080	4.521	540.4
108	90.000	.65000	1392.0	.4910-01	.6060-01	.6940-01	.9228	.3540-02	.2505-02	.4860	3.612	540.6
107	90.000	.74000	1393.0	.2860-01	.3560-01	.4110-01	.9228	.2096-02	.1462-02	.2760	2.076	550.1
107	90.000	.76500	1394.0	.1447	.1797	.2069	.9228	.1056-01	.7387-02	1.402	10.39	548.9
107	90.000	.77100	1395.0	.7450-01	.9220-01	.1059	.9228	.5404-02	.3801-02	.7300	5.418	546.5
107	90.000	.81500	1396.0	.2330-01	.2870-01	.3280-01	.9228	.1676-02	.1190-02	.2340	1.771	541.9
107	90.000	.83700	1397.0	.2390-01	.2940-01	.3370-01	.9228	.1718-02	.1220-02	.2400	1.782	542.2
107	90.000	.88400	1398.0	.1730-01	.2130-01	.2430-01	.9228	.1242-02	.8826-03	.1740	1.292	541.7
107	90.000	.89400	1399.0	.3960-01	.4840-01	.5500-01	.9228	.2809-02	.2021-02	.4110	3.062	535.5
107	90.000	.90700	1400.0	.2450-01	.3000-01	.3420-01	.9228	.1746-02	.1250-02	.2510	1.871	537.9
107	90.000	.91700	1401.0	.3080-01	.3770-01	.4290-01	.9228	.2188-02	.1573-02	.3190	2.378	535.8

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR11)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
107	90.000	.93200	1402.0	.3500-01	.4310-01	.4920-01	.9228	.2510-02	.1788-02	.3550	2.638	540.4
107	90.000	.93900	1403.0	.3320-01	.4090-01	.4670-01	.9228	.2383-02	.1696-02	.3360	2.497	540.8
108	95.000	.13560	1484.0	.2799	.4380	.6336	.9227	.3233-01	.1429-01	1.454	10.33	632.8
108	95.000	.13730	1485.0	.1935	.2717	.3486	.9227	.1779-01	.9876-02	1.261	9.075	606.8
108	95.000	.14560	1487.0	.1036	.1318	.1548	.9227	.7900-02	.5287-02	.9080	6.678	562.8
108	95.000	.14730	1488.0	.8250-01	.1029	.1189	.9227	.6070-02	.4210-02	.7810	5.782	549.1
107	104.00	.10000+00	1330.0	.8560-01	.1144	.1263	.9360	.6444-02	.4371-02	.6430	4.660	591.7
107	104.00	.12000	1404.0	.2965	.4429	.6084	.9224	.3105-01	.1513-01	1.692	12.06	626.9
107	104.00	.12700	1405.0	.2824	.3985	.5154	.9224	.2630-01	.1441-01	1.826	13.11	612.0
107	104.00	.13400	1406.0	.2301	.3453	.4769	.9224	.2434-01	.1174-01	1.300	9.261	628.0
107	104.00	.14100	1407.0	.1121	.1589	.2065	.9224	.1054-01	.5722-02	.7170	5.148	613.3
107	104.00	.14800	1408.0	.9380-01	.1175	.1365	.9224	.6965-02	.4788-02	.8780	6.482	555.3
107	104.00	.15500	1409.0	.4690-01	.5900-01	.6890-01	.9224	.3516-02	.2392-02	.4290	3.160	559.4
107	104.00	.16200	1410.0	.3110-01	.3920-01	.4580-01	.9224	.2338-02	.1590-02	.2840	2.096	559.7
107	104.00	.17300	1411.0	.4930-01	.6110-01	.7040-01	.9224	.3593-02	.2515-02	.4800	3.561	547.7
107	104.00	.18000	1412.0	.5640-01	.6950-01	.7970-01	.9224	.4070-02	.2878-02	.5630	4.186	543.0
107	104.00	.18600	1413.0	.5620-01	.6910-01	.7910-01	.9224	.4036-02	.2870-02	.5690	4.234	540.4
107	104.00	.19300	1414.0	.5260-01	.6460-01	.7390-01	.9224	.3770-02	.2683-02	.5330	3.966	540.0
107	104.00	.20000	1415.0	.4200-01	.5160-01	.5900-01	.9224	.3010-02	.2146-02	.4280	3.189	539.1
107	104.00	.25000	1416.0	.1500-01	.1830-01	.2080-01	.9224	.1063-02	.7646-03	.1560	1.184	534.6
108	112.00	.13560	1489.0	.7990-01	.1024	.1214	.9223	.6195-02	.4077-02	.6810	4.999	567.4
108	112.00	.13730	1490.0	.8020-01	.1046	.1258	.9223	.6418-02	.4095-02	.6460	4.720	576.7
108	112.00	.13890	1491.0	.9510-01	.1257	.1530	.9223	.7808-02	.4851-02	.7310	5.325	583.7
108	112.00	.14560	1492.0	.1008	.1278	.1501	.9223	.7659-02	.5144-02	.8940	6.586	560.6
108	112.00	.14730	1493.0	.4560-01	.5770-01	.6760-01	.9223	.3451-02	.2329-02	.4090	3.017	558.8
107	112.50	.74000	1417.0	.1071	.1370	.1622	.9222	.8276-02	.5468-02	.9260	6.789	569.4
107	112.50	.75000	1418.0	.1107	.1439	.1727	.9222	.8815-02	.5649-02	.9030	6.594	578.7
108	112.50	.77100	1419.0	.5600-01	.7080-01	.8290-01	.9222	.4232-02	.2858-02	.5030	3.768	558.6
107	112.50	.92500	1420.0	.4050-01	.4960-01	.5660-01	.9222	.2891-02	.2067-02	.4170	3.108	537.0
107	112.50	.93200	1421.0	.4240-01	.5210-01	.5970-01	.9222	.3046-02	.2162-02	.4280	3.186	540.6
107	112.50	.93900	1422.0	.4080-01	.5020-01	.5750-01	.9222	.2933-02	.2084-02	.4140	3.080	540.1
107	112.50	.95300	1440.0	.4580-01	.5640-01	.6040-01	.9356	.3085-02	.2338-02	.4600	3.417	542.1
108	112.50	.96700	1441.0	.6430-01	.7870-01	.8410-01	.9356	.4290-02	.3283-02	.6610	4.936	533.2
108	112.50	.99400	1443.0	.4440-01	.5520-01	.5940-01	.9356	.3033-02	.2263-02	.4220	3.126	548.1
108	135.00	.80000-02	1331.0	.2799	.4015	.4769	.9318	.2434-01	.1428-01	1.731	13.07	613.3
107	135.00	.25000-01	1332.0	.1958	.2800	.3318	.9318	.1693-01	.9891-02	1.227	8.791	615.9
108	135.00	.50000-01	1333.0	.1383	.1829	.2071	.9318	.1057-01	.7059-02	1.064	7.746	583.8
107	135.00	.75000-01	1334.0	.2980-01	.3820-01	.4250-01	.9318	.2171-02	.1523-02	.2570	1.914	570.1
107	135.00	.10000+00	1335.0	.4420-01	.5680-01	.6340-01	.9318	.3236-02	.2255-02	.3740	2.740	572.7
107	135.00	.40000	1423.0	.2070-01	.2550-01	.2920-01	.9220	.1493-02	.1055-02	.2070	1.566	542.3
108	135.00	.92500	1424.0	.3780-01	.4620-01	.5280-01	.9220	.2697-02	.1928-02	.3880	2.893	533.5
108	140.00	.13560	1494.0	.4070-01	.5060-01	.5850-01	.9220	.2986-02	.2077-02	.3910	2.899	546.3
108	140.00	.13730	1495.0	.3630-01	.4510-01	.5230-01	.9220	.2667-02	.1852-02	.3470	2.575	547.0

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR11)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
108	140.00	.13890	1496.0	.3630-01	.4520-01	.5230-01	.9220	.2670-02	.1851-02	.3460	2.564	547.7
108	140.00	.14560	1497.0	.4200-01	.5210-01	.6030-01	.9220	.3075-02	.2141-02	.4040	2.998	545.8
108	150.00	.14230	1499.0	.3630-01	.4480-01	.5170-01	.9220	.2638-02	.1850-02	.3550	2.635	542.8
108	180.00	.80000-02	1298.0	.2460	.3533	.4406	.9273	.2248-01	.1255-01	1.517	11.45	613.7
108	180.00	.15000-01	1299.0	.1568	.2099	.2479	.9273	.1265-01	.8001-02	1.162	8.297	589.3
107	180.00	.25000-01	1300.0	.1754	.2441	.2969	.9273	.1515-01	.8950-02	1.174	8.044	607.5
108	180.00	.50000-01	1301.0	.1062	.1395	.1626	.9273	.8297-02	.5420-02	.8340	5.794	580.6
107	180.00	.75000-01	1302.0	.2130-01	.2730-01	.3130-01	.9273	.1598-02	.1089-02	.1840	1.261	570.1
108	180.00	.10000+00	1303.0	.4820-01	.6280-01	.7280-01	.9273	.3713-02	.2460-02	.3890	2.843	576.3
107	225.00	.98000	1425.0	.6150-01	.8030-01	.9380-01	.9263	.4787-02	.3140-02	.4970	3.622	580.5
107	225.00	.99400	1426.0	.1870-01	.2410-01	.2800-01	.9263	.1429-02	.9524-03	.1550	1.135	575.6
107	263.00	.13600	1336.0	.2300-01	.2830-01	.3240-01	.9220	.1652-02	.1175-02	.2340	1.745	539.2
108	263.00	.20000	1472.0	.2370-01	.2890-01	.3290-01	.9220	.1679-02	.1209-02	.2480	1.853	529.7
108	263.00	.30000	1337.0	.2810-01	.3410-01	.3870-01	.9220	.1976-02	.1432-02	.2980	2.270	526.5
108	263.00	.40000	1473.0	.2220-01	.2710-01	.3090-01	.9220	.1579-02	.1133-02	.2300	1.715	531.8
108	263.00	.50000	1474.0	.1880-01	.2300-01	.2610-01	.9220	.1334-02	.9618-03	.1970	1.477	529.2
108	263.00	.60000	1475.0	.1690-01	.2060-01	.2340-01	.9220	.1195-02	.8616-03	.1770	1.325	529.0
108	263.00	.75000	1338.0	.2150-01	.2670-01	.3080-01	.9220	.1573-02	.1095-02	.2070	1.534	545.8
108	263.00	.81500	1339.0	.2610-01	.3180-01	.3630-01	.9220	.1853-02	.1330-02	.2700	2.015	531.7
108	263.00	.83700	1340.0	.2400-01	.2930-01	.3340-01	.9220	.1703-02	.1226-02	.2510	1.873	530.1
108	263.00	.88400	1341.0	.1690-01	.2090-01	.2410-01	.9220	.1231-02	.8632-03	.1650	1.229	542.9
108	263.00	.89400	1342.0	.4360-01	.5340-01	.6110-01	.9220	.3119-02	.2222-02	.4430	3.303	535.2
108	263.00	.92800	1477.0	.3750-01	.4650-01	.5370-01	.9220	.2743-02	.1915-02	.3640	2.701	544.5
107	263.00	.93900	1344.0	.3500-01	.4410-01	.5160-01	.9220	.2635-02	.1786-02	.3130	2.353	559.8
108	270.00	.80000-02	1304.0	.2019	.2646	.3080	.9273	.1572-01	.1030-01	1.595	12.47	579.7
108	270.00	.50000-01	1306.0	.1243	.1627	.1892	.9273	.9656-02	.6345-02	.9880	6.863	578.9
107	270.00	.75000-01	1307.0	.5840-01	.7480-01	.8570-01	.9273	.4375-02	.2981-02	.5020	3.507	570.1
108	270.00	.10000+00	1308.0	.7400-01	.9590-01	.1108	.9273	.5655-02	.3775-02	.6060	4.433	574.0
107	270.00	.11500	1345.0	.7250-01	.9190-01	.1081	.9220	.5519-02	.3698-02	.6460	4.750	564.0
107	277.00	.13600	1346.0	.2350-01	.2880-01	.3300-01	.9220	.1683-02	.1202-02	.2420	1.806	537.1
107	277.00	.30000	1347.0	.3710-01	.4490-01	.5080-01	.9220	.2594-02	.1892-02	.4030	3.069	525.8
108	277.00	.40000	1464.0	.2580-01	.3150-01	.3580-01	.9220	.1828-02	.1318-02	.2710	2.027	529.0
108	277.00	.60000	1466.0	.8700-02	.1060-01	.1210-01	.9220	.6166-03	.4446-03	.9100-01	.6830	529.1
108	277.00	.70000	1467.0	.1230-01	.1510-01	.1720-01	.9220	.8781-03	.6292-03	.1270	.9500	532.4
107	277.00	.81500	1349.0	.2520-01	.3100-01	.3550-01	.9220	.1812-02	.1288-02	.2570	1.911	539.4
107	277.00	.83700	1350.0	.2150-01	.2630-01	.3020-01	.9220	.1540-02	.1095-02	.2180	1.626	539.2
107	277.00	.89400	1352.0	.4770-01	.5900-01	.6800-01	.9220	.3472-02	.2436-02	.4700	3.487	545.7
108	277.00	.90000	1468.0	.2610-01	.3240-01	.3740-01	.9220	.1911-02	.1330-02	.2510	1.859	546.1
108	277.00	.90700	1353.0	.1540-01	.1920-01	.2240-01	.9220	.1141-02	.7848-03	.1440	1.067	550.8
108	277.00	.92100	1469.0	.2930-01	.3620-01	.4170-01	.9220	.2130-02	.1493-02	.2860	2.128	542.8
108	277.00	.92800	1470.0	.2850-01	.3560-01	.4150-01	.9220	.2116-02	.1453-02	.2660	1.964	551.8
108	277.00	.93700	1471.0	.3120-01	.3930-01	.4600-01	.9220	.2347-02	.1591-02	.2830	2.086	556.8
107	277.00	.93900	1354.0	.1960-01	.2500-01	.2950-01	.9220	.1508-02	.1001-02	.1720	1.261	567.1

IH72. AEDC V41A-R2A. INTEGRATED VEHICLE HEATING RATES

IH72. OTS W/PROTUBERANCES. RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
108	335.00	.11000	1309.0	.1601	.2090	.2308	.9345	.1178-01	.8168-02	1.281	9.355	577.6
107	337.50	.74000	1355.0	.7080-01	.9050-01	.1069	.9222	.5457-02	.3616-02	.6160	4.515	568.4
107	337.50	.75000	1356.0	.6080-01	.7900-01	.9480-01	.9222	.4837-02	.3101-02	.4960	3.683	578.6
108	337.50	.76500	1357.0	.6390-01	.7880-01	.9060-01	.9222	.4621-02	.3261-02	.6330	4.785	540.5
108	337.50	.92500	1359.0	.3630-01	.4560-01	.5320-01	.9222	.2715-02	.1855-02	.3340	2.471	554.2
108	337.50	.93200	1360.0	.5070-01	.6470-01	.7640-01	.9222	.3899-02	.2588-02	.4400	3.232	564.6
108	337.50	.93900	1361.0	.4660-01	.6060-01	.7260-01	.9222	.3705-02	.2381-02	.3800	2.781	574.8

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR12)

RIGHT SRB

PARAMETRIC DATA

ALPHA = -5.000 BETA = .0000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
109	-4.940	.0000	4.020	72.80	734.0	173.5	.4670	5.280	2594.	.2257-03	.1397-06	4.193
110	-4.940	.0000	4.020	72.70	734.0	173.5	.4660	5.273	2594.	.2255-03	.1396-06	4.189

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
109	.5103-01	.1125-01
110	.5100-01	.1126-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
109	.00000	.25000-01	1311.0	.3829	.4933	.5308	.9378	.2709-01	.1954-01	3.204	23.09	570.2
109	.00000	.76500	1362.0	.1274	.1617	.1893	.9228	.9661-02	.6504-02	1.128	8.446	560.8
109	.00000	.83700	1364.0	.7210-01	.9000-01	.1040	.9228	.5307-02	.3679-02	.6800	5.033	549.5
109	.00000	.88400	1365.0	.1468	.1868	.2193	.9228	.1119-01	.7489-02	1.283	9.440	562.8
109	.00000	.90700	1366.0	.1204	.1532	.1799	.9228	.9178-02	.6146-02	1.054	7.755	562.7
109	5.0000	.75000-01	1313.0	.2260	.2855	.3052	.9377	.1557-01	.1154-01	2.034	14.52	557.9
109	15.600	.95300	1431.0	.1216	.1572	.1686	.9384	.8606-02	.6207-02	1.008	7.379	571.9
109	20.000	.10000+00	1318.0	.2264	.2860	.3063	.9374	.1563-01	.1155-01	2.036	15.01	558.0
109	20.000	.11000	1319.0	.2255	.2837	.3034	.9374	.1548-01	.1151-01	2.060	15.22	555.1
109	20.000	.95300	1432.0	.8890-01	.1134	.1212	.9382	.6187-02	.4536-02	.7710	5.666	564.2
110	22.500	.72400	1367.0	.1059	.1355	.1599	.9227	.8154-02	.5402-02	.9080	6.784	565.9
109	22.500	.74000	1368.0	.2221	.2907	.3497	.9227	.1785-01	.1133-01	1.762	12.86	578.7
109	22.500	.75000	1369.0	.3851	.5331	.6747	.9227	.3443-01	.1965-01	2.599	18.76	601.9
110	22.500	.76500	1370.0	.1629	.2059	.2407	.9227	.1228-01	.8306-02	1.457	10.92	558.6
110	22.500	.77100	1371.0	.9060-01	.1126	.1298	.9227	.6620-02	.4620-02	.8680	6.438	546.2
109	22.500	.92500	1372.0	.4200-01	.5210-01	.6010-01	.9227	.3065-02	.2142-02	.4040	2.996	545.7
109	22.500	.93900	1374.0	.8080-01	.1017	.1185	.9227	.6045-02	.4124-02	.7370	5.440	555.6
109	24.400	.95300	1433.0	.1013	.1300	.1395	.9380	.7118-02	.5169-02	.8590	6.303	568.0
109	35.000	.75000-01	1321.0	.2708	.3442	.3711	.9366	.1894-01	.1382-01	2.381	16.95	561.9
109	35.000	.11000	1322.0	.1882	.2355	.2525	.9366	.1289-01	.9605-02	1.756	13.21	551.4

IH72. OTS W/PROTUBERANCES, RIGHT SRB

(RVZR12)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HI/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
109	35.600	.95300	1434.0	.7560-01	.9560-01	.1024	.9374	.5228-02	.3856-02	.6760	4.979	559.0
109	40.000	.95300	1435.0	.6150-01	.7730-01	.8280-01	.9371	.4227-02	.3140-02	.5640	4.165	554.6
109	45.000	.74000	1375.0	.2810	.3708	.4502	.9224	.2297-01	.1434-01	2.173	16.10	582.6
109	45.000	.75000	1376.0	.4772	.6559	.8268	.9224	.4219-01	.2435-01	3.280	24.10	599.5
110	45.000	.76500	1377.0	.1830	.2330	.2744	.9224	.1400-01	.9331-02	1.594	11.73	563.2
110	45.000	.77100	1378.0	.1063	.1332	.1550	.9224	.7903-02	.5419-02	.9820	7.261	552.8
110	45.000	.81500	1379.0	.3050-01	.3800-01	.4390-01	.9224	.2238-02	.1558-02	.2920	2.167	546.6
110	45.000	.88400	1381.0	.2880-01	.3580-01	.4120-01	.9224	.2103-02	.1470-02	.2780	2.064	544.9
110	45.000	.90700	1382.0	.4600-01	.5670-01	.6510-01	.9224	.3319-02	.2344-02	.4550	3.385	540.0
109	65.000	.11000	1323.0	.2590	.3307	.3624	.9342	.1849-01	.1322-01	2.236	16.16	565.0
109	67.500	.74000	1383.0	.2476	.3227	.3883	.9221	.1982-01	.1263-01	1.993	14.80	576.5
109	67.500	.75000	1384.0	.4294	.5793	.7193	.9221	.3671-01	.2191-01	3.108	22.91	592.3
110	67.500	.77100	1385.0	.2293	.2894	.3390	.9221	.1729-01	.1169-01	2.065	15.23	557.4
109	76.000	.10000+00	1324.0	.1582	.2007	.2206	.9332	.1126-01	.8073-02	1.399	10.30	560.8
109	76.000	.14100	1386.0	.2564	.3369	.4086	.9220	.2085-01	.1308-01	2.009	14.65	580.6
109	76.000	.14800	1387.0	.1729	.2164	.2518	.9220	.1285-01	.8822-02	1.611	11.92	551.6
109	76.000	.15500	1388.0	.1143	.1408	.1617	.9220	.8254-02	.5832-02	1.137	8.467	539.1
109	76.000	.16200	1389.0	.1011	.1241	.1423	.9220	.7260-02	.5157-02	1.019	7.597	536.6
109	76.000	.25000	1390.0	.2800-01	.3370-01	.3810-01	.9220	.1942-02	.1427-02	.3080	2.355	518.4
109	77.500	.95300	1436.0	.4240-01	.5250-01	.5690-01	.9338	.2905-02	.2164-02	.4120	3.059	543.8
109	77.500	.99400	1439.0	.4580-01	.5760-01	.6290-01	.9338	.3212-02	.2336-02	.4160	3.073	556.0
110	90.000	.15000-01	1325.0	.3056	.3896	.4326	.9319	.2206-01	.1559-01	2.654	19.84	563.8
109	90.000	.25000-01	1326.0	.3694	.4833	.5439	.9319	.2776-01	.1885-01	2.937	21.08	578.4
110	90.000	.40000-01	1327.0	.2762	.3502	.3878	.9319	.1978-01	.1409-01	2.447	18.02	560.4
109	90.000	.60000-01	1328.0	.2007	.2522	.2780	.9319	.1419-01	.1024-01	1.843	12.76	554.3
109	90.000	.75000-01	1329.0	.1093	.1361	.1493	.9319	.7621-02	.5577-02	1.039	7.111	547.8
110	90.000	.13230	1479.0	.4069	.7574	1.463	.9220	.7463-01	.2075-01	1.646	11.57	654.8
110	90.000	.13390	1480.0	.4291	.8948	2.281	.9220	.1163	.2189-01	1.543	10.81	663.5
110	90.000	.13560	1481.0	.3678	.6163	.9913	.9220	.5055-01	.1876-01	1.708	12.08	643.0
110	90.000	.13730	1482.0	.2751	.3877	.5030	.9220	.2565-01	.1403-01	1.773	12.75	607.7
110	90.000	.13890	1483.0	.1538	.1993	.2390	.9220	.1219-01	.7843-02	1.260	9.220	573.4
110	90.000	.55000	1391.0	.8180-01	.1018	.1180	.9220	.6017-02	.4174-02	.7800	5.785	547.1
110	90.000	.65000	1392.0	.5260-01	.6540-01	.7570-01	.9220	.3858-02	.2683-02	.5040	3.739	546.2
109	90.000	.74000	1393.0	.1870-01	.2330-01	.2700-01	.9220	.1379-02	.9532-03	.1770	1.331	548.8
109	90.000	.76500	1394.0	.1709	.2144	.2500	.9220	.1276-01	.8721-02	1.578	11.67	553.2
109	90.000	.77100	1395.0	.1368	.1716	.2001	.9220	.1021-01	.6983-02	1.265	9.355	553.0
109	90.000	.81500	1396.0	.2150-01	.2660-01	.3060-01	.9220	.1562-02	.1096-02	.2100	1.590	542.2
109	90.000	.83700	1397.0	.1650-01	.2050-01	.2370-01	.9220	.1211-02	.8438-03	.1590	1.182	545.3
109	90.000	.88400	1398.0	.3110-01	.3860-01	.4470-01	.9220	.2279-02	.1586-02	.2990	2.218	545.7
109	90.000	.89400	1399.0	.4920-01	.6050-01	.6940-01	.9220	.3543-02	.2510-02	.4930	3.675	537.7
109	90.000	.90700	1400.0	.2800-01	.3440-01	.3960-01	.9220	.2019-02	.1427-02	.2790	2.075	538.9
109	90.000	.91700	1401.0	.3780-01	.4640-01	.5310-01	.9220	.2712-02	.1927-02	.3810	2.841	536.4
109	90.000	.93200	1402.0	.3470-01	.4300-01	.4950-01	.9220	.2527-02	.1773-02	.3400	2.527	542.4

DATE 23 JUN 81

IH72. AEDC V41A-R2A. INTEGRATED VEHICLE HEATING RATES

(RVZR12)

IH72. OTS W/PROTUBERANCES. RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
109	90.000	.93900	1403.0	.3960-01	.4910-01	.5660-01	.9220	.2889-02	.2022-02	.3860	2.867	543.3
110	95.000	.13560	1484.0	.3570	.5555	.8067	.9220	.4114-01	.1821-01	1.870	13.30	631.3
110	95.000	.13730	1485.0	.2767	.3879	.5005	.9220	.2553-01	.1411-01	1.807	13.01	606.0
110	95.000	.13890	1486.0	.1905	.2568	.3190	.9220	.1627-01	.9718-02	1.382	10.02	591.9
110	95.000	.14560	1487.0	.1241	.1563	.1829	.9220	.9330-02	.6330-02	1.127	8.320	556.0
110	95.000	.14730	1488.0	.1075	.1330	.1535	.9220	.7826-02	.5481-02	1.047	7.782	543.0
109	104.00	.10000+00	1330.0	.1564	.1992	.2228	.9307	.1137-01	.7980-02	1.362	10.01	563.5
109	104.00	.12000	1404.0	.3434	.5058	.6879	.9220	.3511-01	.1752-01	2.004	14.33	619.8
109	104.00	.12700	1405.0	.2987	.4191	.5413	.9220	.2762-01	.1524-01	1.947	14.02	606.4
109	104.00	.13400	1406.0	.3113	.4515	.6036	.9220	.3080-01	.1589-01	1.879	13.46	615.9
109	104.00	.14100	1407.0	.2279	.3103	.3890	.9220	.1985-01	.1163-01	1.608	11.64	595.9
109	104.00	.14800	1408.0	.8200-01	.1013	.1168	.9220	.5959-02	.4185-02	.8050	5.983	541.8
109	104.00	.15500	1409.0	.7220-01	.8910-01	.1026	.9220	.5235-02	.3686-02	.7130	5.304	540.7
109	104.00	.16200	1410.0	.5910-01	.7290-01	.8390-01	.9220	.4281-02	.3013-02	.5830	4.335	540.8
109	104.00	.17300	1411.0	.5720-01	.7000-01	.8000-01	.9220	.4084-02	.2919-02	.5860	4.373	533.5
109	104.00	.18000	1412.0	.5390-01	.6590-01	.7520-01	.9220	.3839-02	.2752-02	.5570	4.161	531.9
109	104.00	.18600	1413.0	.4950-01	.6050-01	.6900-01	.9220	.3523-02	.2527-02	.5120	3.826	531.6
109	104.00	.19300	1414.0	.4870-01	.5950-01	.6800-01	.9220	.3470-02	.2485-02	.5010	3.745	532.5
109	104.00	.20000	1415.0	.4440-01	.5430-01	.6200-01	.9220	.3163-02	.2265-02	.4570	3.412	532.5
109	104.00	.25000	1416.0	.2100-01	.2550-01	.2900-01	.9220	.1481-02	.1072-02	.2230	1.696	526.6
110	112.00	.13560	1489.0	.1118	.1407	.1645	.9220	.8388-02	.5700-02	1.019	7.521	555.4
110	112.00	.13730	1490.0	.1374	.1753	.2073	.9220	.1057-01	.7006-02	1.190	8.747	564.2
110	112.00	.13890	1491.0	.1623	.2103	.2520	.9220	.1285-01	.8278-02	1.332	9.749	573.2
110	112.00	.14560	1492.0	.1120	.1396	.1618	.9220	.8253-02	.5713-02	1.063	7.874	548.1
110	112.00	.14730	1493.0	.7490-01	.9310-01	.1078	.9220	.5496-02	.3822-02	.7190	5.331	546.1
109	112.50	.74000	1417.0	.1311	.1757	.2171	.9220	.1108-01	.6689-02	.9670	7.017	589.7
109	112.50	.75000	1418.0	.1039	.1437	.1831	.9220	.9342-02	.5301-02	.7020	5.064	601.8
110	112.50	.77100	1419.0	.2700-01	.3520-01	.4240-01	.9220	.2163-02	.1379-02	.2180	1.621	575.9
109	112.50	.92500	1420.0	.4630-01	.5690-01	.6520-01	.9220	.3330-02	.2362-02	.4660	3.469	537.1
109	112.50	.93200	1421.0	.4510-01	.5580-01	.6440-01	.9220	.3286-02	.2302-02	.4400	3.270	543.0
109	112.50	.93900	1422.0	.4630-01	.5740-01	.6630-01	.9220	.3382-02	.2365-02	.4500	3.344	543.7
109	112.50	.95300	1440.0	.6130-01	.7590-01	.8370-01	.9307	.4269-02	.3126-02	.5940	4.413	544.1
110	112.50	.96700	1441.0	.6530-01	.8120-01	.8970-01	.9307	.4573-02	.3331-02	.6240	4.628	546.7
110	112.50	.99400	1443.0	.4270-01	.5410-01	.6030-01	.9307	.3073-02	.2179-02	.3810	2.810	559.1
110	135.00	.80000-02	1331.0	.3452	.4495	.5164	.9286	.2634-01	.1761-01	2.785	21.43	575.9
109	135.00	.25000-01	1332.0	.2751	.3580	.4112	.9286	.2098-01	.1404-01	2.223	16.25	575.8
110	135.00	.50000-01	1333.0	.1774	.2237	.2518	.9286	.1284-01	.9046-02	1.605	11.84	556.7
109	135.00	.75000-01	1334.0	.7820-01	.9770-01	.1093	.9286	.5580-02	.3991-02	.7350	5.533	550.0
109	135.00	.10000+00	1335.0	.8460-01	.1058	.1184	.9286	.6044-02	.4319-02	.7930	5.872	550.5
109	135.00	.40000	1423.0	.2580-01	.3200-01	.3690-01	.9220	.1884-02	.1315-02	.2490	1.882	544.6
110	135.00	.92500	1424.0	.4820-01	.5990-01	.6950-01	.9220	.3542-02	.2456-02	.4590	3.402	547.2
110	140.00	.13560	1494.0	.5340-01	.6590-01	.7590-01	.9220	.3871-02	.2723-02	.5260	3.911	541.0
110	140.00	.13730	1495.0	.4300-01	.5310-01	.6110-01	.9220	.3117-02	.2195-02	.4250	3.163	540.4

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR12)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
110	140.00	.13890	1496.0	.4640-01	.5710-01	.6560-01	.9220	.3346-02	.2365-02	.4620	3.439	538.8
110	140.00	.14560	1497.0	.4660-01	.5720-01	.6550-01	.9220	.3342-02	.2377-02	.4720	3.517	535.7
110	150.00	.14230	1499.0	.3850-01	.4720-01	.5400-01	.9220	.2752-02	.1963-02	.3920	2.923	534.5
110	180.00	.80000-02	1298.0	.3146	.4108	.4767	.9274	.2431-01	.1604-01	2.513	19.32	577.4
109	180.00	.15000-01	1299.0	.1638	.2069	.2349	.9274	.1198-01	.8351-02	1.469	10.65	558.2
110	180.00	.25000-01	1300.0	.2623	.3327	.3786	.9274	.1932-01	.1339-01	2.323	16.30	560.6
109	180.00	.50000-01	1301.0	.1696	.2130	.2409	.9274	.1228-01	.8647-02	1.556	10.95	554.1
110	180.00	.75000-01	1302.0	.9130-01	.1142	.1288	.9274	.6572-02	.4661-02	.8540	5.928	550.9
109	225.00	.10000+00	1303.0	.1212	.1531	.1737	.9274	.8856-02	.6183-02	1.092	8.052	557.5
109	225.00	.98000	1425.0	.3990-01	.5160-01	.5890-01	.9292	.3005-02	.2035-02	.3280	2.400	573.0
109	263.00	.99400	1426.0	.1480-01	.1910-01	.2180-01	.9292	.1111-02	.7570-03	.1240	.9050	570.9
110	263.00	.13600	1336.0	.4140-01	.5050-01	.5760-01	.9220	.2940-02	.2111-02	.4290	3.204	531.1
110	263.00	.20000	1472.0	.4240-01	.5130-01	.5820-01	.9220	.2966-02	.2160-02	.4550	3.415	523.4
110	263.00	.30000	1337.0	.4130-01	.4990-01	.5650-01	.9220	.2881-02	.2107-02	.4490	3.432	520.9
110	263.00	.40000	1473.0	.3030-01	.3700-01	.4230-01	.9220	.2156-02	.1544-02	.3120	2.327	532.3
110	263.00	.50000	1474.0	.2530-01	.3100-01	.3540-01	.9220	.1803-02	.1293-02	.2610	1.953	531.9
110	263.00	.60000	1475.0	.1520-01	.1850-01	.2110-01	.9220	.1078-02	.7763-03	.1590	1.189	529.3
110	263.00	.75000	1338.0	.8200-02	.1010-01	.1160-01	.9220	.5934-03	.4182-03	.8100-01	.6030	540.1
110	263.00	.81500	1339.0	.1690-01	.2060-01	.2340-01	.9220	.1193-02	.8627-03	.1780	1.335	527.5
110	263.00	.83700	1340.0	.1840-01	.2240-01	.2550-01	.9220	.1298-02	.9409-03	.1960	1.466	526.2
110	263.00	.88400	1341.0	.2690-01	.3300-01	.3790-01	.9220	.1931-02	.1372-02	.2710	2.022	536.4
110	263.00	.89400	1342.0	.3920-01	.4780-01	.5450-01	.9220	.2779-02	.1997-02	.4070	3.040	530.5
109	263.00	.92800	1477.0	.2820-01	.3480-01	.4000-01	.9220	.2042-02	.1437-02	.2780	2.064	540.9
110	263.00	.93900	1344.0	.4040-01	.5030-01	.5830-01	.9220	.2975-02	.2061-02	.3840	2.849	547.7
110	270.00	.80000-02	1304.0	.2137	.2660	.2918	.9319	.1488-01	.1090-01	2.035	16.16	547.4
110	270.00	.50000-01	1306.0	.1918	.2397	.2635	.9319	.1344-01	.9783-02	1.798	12.68	550.3
109	270.00	.75000-01	1307.0	.1357	.1693	.1859	.9319	.9485-02	.6924-02	1.281	9.040	549.1
110	270.00	.10000+00	1308.0	.1543	.1938	.2136	.9319	.1089-01	.7868-02	1.416	10.46	554.1
109	270.00	11500	1345.0	.1077	.1359	.1592	.9220	.8126-02	.5494-02	.9710	7.163	557.4
109	277.00	.13600	1346.0	.3390-01	.4140-01	.4720-01	.9220	.2407-02	.1732-02	.3540	2.645	530.0
109	277.00	.30000	1347.0	.3990-01	.4800-01	.5420-01	.9220	.2765-02	.2034-02	.4400	3.371	517.7
110	277.00	.40000	1464.0	.3420-01	.4170-01	.4760-01	.9220	.2428-02	.1744-02	.3550	2.650	530.8
110	277.00	.60000	1466.0	.3820-01	.4670-01	.5330-01	.9220	.2720-02	.1948-02	.3930	2.937	532.3
110	277.00	.70000	1467.0	.3580-01	.4380-01	.5010-01	.9220	.2556-02	.1826-02	.3660	2.732	533.6
109	277.00	.75000	1348.0	.5050-01	.6250-01	.7210-01	.9220	.3679-02	.2575-02	.4910	3.649	543.4
109	277.00	.81500	1349.0	.3610-01	.4400-01	.5010-01	.9220	.2557-02	.1840-02	.3760	2.812	529.9
109	277.00	.83700	1350.0	.3320-01	.4050-01	.4610-01	.9220	.2351-02	.1695-02	.3480	2.604	528.9
109	277.00	.88400	1351.0	.6560-01	.8070-01	.9250-01	.9220	.4722-02	.3348-02	.6590	4.911	537.3
109	277.00	.89400	1352.0	.5250-01	.6430-01	.7350-01	.9220	.3751-02	.2677-02	.5350	3.995	534.2
110	277.00	.90000	1468.0	.5500-01	.6790-01	.7830-01	.9220	.3994-02	.2802-02	.5380	3.997	542.2
110	277.00	.90700	1353.0	.5550-01	.6880-01	.7950-01	.9220	.4057-02	.2830-02	.5360	3.978	544.7
110	277.00	.92100	1469.0	.4750-01	.5840-01	.6700-01	.9220	.3417-02	.2420-02	.4750	3.538	537.8
110	277.00	.92800	1470.0	.5490-01	.6810-01	.7870-01	.9220	.4014-02	.2801-02	.5310	3.939	544.6

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR12)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
110	277.00	.93700	1471.0	.7230-01	.9010-01	.1046	.9220	.5334-02	.3686-02	.6830	5.063	548.7
109	277.00	.93900	1354.0	.8650-01	.1082	.1259	.9220	.6424-02	.4412-02	.8070	5.969	551.3
110	335.00	.11000	1309.0	.2319	.2925	.3135	.9372	.1599-01	.1183-01	2.096	15.46	556.9
109	337.50	.74000	1355.0	.1029	.1303	.1525	.9227	.7780-02	.5253-02	.9180	6.762	559.5
109	337.50	.75000	1356.0	.6970-01	.8930-01	.1055	.9227	.5384-02	.3557-02	.5950	4.441	566.9
110	337.50	.76500	1357.0	.8860-01	.1096	.1259	.9227	.6423-02	.4516-02	.8630	6.523	542.9
110	337.50	.92500	1359.0	.6300-01	.7980-01	.9330-01	.9227	.4761-02	.3213-02	.5610	4.134	559.5
110	337.50	.93200	1360.0	.7400-01	.9490-01	.1122	.9227	.5724-02	.3772-02	.6280	4.606	567.7
110	337.50	.93900	1361.0	.1046	.1368	.1644	.9227	.8382-02	.5335-02	.8330	6.081	578.0

PARAMETRIC DATA

ALPHA = -5.000 BETA = 5.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
105	-4.950	5.000	4.020	72.60	739.0	174.5	.4660	5.270	2602.	.2240-03	.1405-06	4.148
106	-4.970	5.000	4.020	72.80	739.0	174.6	.4670	5.279	2603.	.2242-03	.1406-06	4.152

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
105	.5103-01	.1131-01
106	.5107-01	.1130-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
105	.00000	.25000-01	1311.0	.4070	.5315	.5749	.9377	.2934-01	.2077-01	3.272	23.46	581.0
105	.00000	.76500	1362.0	.1399	.1776	.2082	.9228	.1062-01	.7136-02	1.239	9.263	564.9
105	.00000	.83700	1364.0	.6290-01	.7810-01	.8990-01	.9228	.4588-02	.3208-02	.6080	4.505	549.0
105	.00000	.88400	1365.0	.1030	.1307	.1532	.9228	.7818-02	.5254-02	.9130	6.711	564.7
105	.00000	.90700	1366.0	.1452	.1832	.2135	.9228	.1089-01	.7411-02	1.322	9.735	560.2
105	5.0000	.75000-01	1313.0	.2543	.3210	.3444	.9371	.1757-01	.1298-01	2.306	16.44	560.8
105	15.600	.95300	1431.0	.1352	.1718	.1853	.9365	.9453-02	.6897-02	1.196	8.786	565.2
105	20.000	.75000-01	1316.0	.2575	.3257	.3535	.9351	.1804-01	.1314-01	2.316	16.49	562.2
105	20.000	.10000+00	1318.0	.2405	.3047	.3309	.9351	.1688-01	.1227-01	2.153	15.84	563.1
105	20.000	.11000	1319.0	.2311	.2919	.3167	.9351	.1616-01	.1179-01	2.088	15.37	561.4
106	22.500	.95300	1432.0	.1151	.1450	.1565	.9359	.7983-02	.5871-02	1.050	7.733	559.8
105	22.500	.72400	1367.0	.1562	.2011	.2393	.9222	.1222-01	.7976-02	1.319	9.817	573.5
105	22.500	.74000	1368.0	.1643	.2159	.2614	.9222	.1334-01	.8383-02	1.296	9.432	584.0
106	22.500	.75000	1369.0	.1503	.2120	.2747	.9222	.1402-01	.7669-02	.9730	6.983	611.7
106	22.500	.76500	1370.0	.1616	.2051	.2411	.9222	.1231-01	.8253-02	1.438	10.75	564.6
106	22.500	.77100	1371.0	.1477	.1833	.2116	.9222	.1081-01	.7542-02	1.434	10.62	548.8
105	22.500	.92500	1372.0	.6670-01	.8250-01	.9490-01	.9222	.4841-02	.3405-02	.6590	4.894	544.9
105	22.500	.93900	1374.0	.1182	.1477	.1715	.9222	.8751-02	.6031-02	1.115	8.236	553.8
105	24.400	.95300	1433.0	.1206	.1524	.1651	.9353	.8426-02	.6152-02	1.088	8.012	561.6
105	35.000	.75000-01	1321.0	.2730	.3463	.3808	.9331	.1943-01	.1393-01	2.432	17.30	564.0

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
105	35.000	.11000	1322.0	.1793	.2248	.2458	.9331	.1254-01	.9150-02	1.671	12.54	555.9
105	35.600	.95300	1434.0	.9470-01	.1187	.1293	.9338	.6596-02	.4833-02	.8850	6.530	555.6
105	40.000	.95300	1435.0	.7100-01	.8850-01	.9660-01	.9332	.4929-02	.3622-02	.6740	4.984	552.5
105	45.000	.74000	1375.0	.2156	.2841	.3456	.9220	.1763-01	.1100-01	1.685	12.46	585.4
105	45.000	.75000	1376.0	.2195	.2995	.3761	.9220	.1919-01	.1120-01	1.550	11.38	600.2
106	45.000	.76500	1377.0	.2647	.3389	.4020	.9220	.2053-01	.1352-01	2.282	16.73	570.1
106	45.000	.77100	1378.0	.2360	.3000	.3536	.9220	.1806-01	.1205-01	2.089	15.34	565.6
106	45.000	.81500	1379.0	.6320-01	.7810-01	.9000-01	.9220	.4598-02	.3226-02	.6230	4.626	545.7
106	45.000	.88400	1381.0	.2880-01	.3580-01	.4130-01	.9220	.2111-02	.1471-02	.2800	2.071	548.9
106	45.000	.90700	1382.0	.4110-01	.5060-01	.5830-01	.9220	.2975-02	.2097-02	.4090	3.039	543.7
105	65.000	.11000	1323.0	.3012	.3853	.4353	.9295	.2221-01	.1537-01	2.599	18.74	569.5
105	67.500	.74000	1383.0	.2578	.3431	.4211	.9220	.2149-01	.1315-01	1.953	14.41	590.1
105	67.500	.75000	1384.0	.4658	.6527	.8418	.9220	.4296-01	.2377-01	3.065	22.41	609.6
106	67.500	.77100	1385.0	.2872	.3689	.4389	.9220	.2241-01	.1467-01	2.445	17.90	572.2
105	76.000	.10000+00	1324.0	.2406	.3047	.3443	.9284	.1757-01	.1227-01	2.155	15.85	563.0
105	76.000	.14100	1386.0	.4095	.5414	.6605	.9220	.3370-01	.2090-01	3.168	23.03	587.0
105	76.000	.14800	1387.0	.2225	.2791	.3255	.9220	.1661-01	.1135-01	2.068	15.26	556.4
105	76.000	.15500	1388.0	.1261	.1554	.1787	.9220	.9120-02	.6434-02	1.259	9.352	543.0
105	76.000	.16200	1389.0	.1100	.1351	.1548	.9220	.7901-02	.5615-02	1.118	8.322	539.5
105	76.000	.25000	1390.0	.3350-01	.4030-01	.4550-01	.9220	.2323-02	.1710-02	.3740	2.856	520.1
105	77.500	.95300	1436.0	.3770-01	.4640-01	.5140-01	.9288	.2623-02	.1924-02	.3790	2.819	541.5
105	77.500	.99400	1439.0	.5300-01	.6630-01	.7410-01	.9288	.3783-02	.2703-02	.4980	3.677	554.4
106	90.000	.15000-01	1325.0	.3229	.4159	.4785	.9273	.2444-01	.1649-01	2.724	20.27	573.7
105	90.000	.25000-01	1326.0	.3793	.5035	.5913	.9273	.3017-01	.1935-01	2.897	20.69	588.8
106	90.000	.40000-01	1327.0	.2760	.3549	.4078	.9273	.2083-01	.1409-01	2.342	17.14	572.8
105	90.000	.60000-01	1328.0	.2313	.2908	.3293	.9273	.1680-01	.1180-01	2.129	14.72	558.2
105	90.000	.75000-01	1329.0	.1393	.1724	.1932	.9273	.9860-02	.7108-02	1.367	9.358	546.3
106	90.000	.13390	1480.0	.2535	.5167	1.235	.9220	.6306-01	.1294-01	.9390	6.565	666.4
106	90.000	.13560	1481.0	.4328	.7336	1.201	.9220	.6135-01	.2210-01	1.991	14.04	648.8
106	90.000	.13730	1482.0	.5418	.7850	1.049	.9220	.5355-01	.2767-01	3.300	23.60	619.7
106	90.000	.55000	1391.0	.8030-01	.9960-01	.1152	.9220	.5884-02	.4100-02	.7800	5.777	548.8
106	90.000	.65000	1392.0	.6310-01	.7800-01	.8980-01	.9220	.4586-02	.3223-02	.6250	4.640	545.0
105	90.000	.74000	1393.0	.3100-01	.3860-01	.4480-01	.9220	.2287-02	.1581-02	.2950	2.220	551.9
105	90.000	.76500	1394.0	.1805	.2260	.2632	.9220	.1343-01	.9208-02	1.687	12.46	555.3
105	90.000	.77100	1395.0	.1206	.1507	.1751	.9220	.8933-02	.6155-02	1.140	8.430	553.3
105	90.000	.81500	1396.0	.2450-01	.3030-01	.3490-01	.9220	.1779-02	.1251-02	.2430	1.834	544.4
105	90.000	.83700	1397.0	.2890-01	.3590-01	.4140-01	.9220	.2111-02	.1477-02	.2830	2.100	546.8
105	90.000	.88400	1398.0	.4380-01	.5410-01	.6230-01	.9220	.3178-02	.2232-02	.4320	3.208	545.0
105	90.000	.89400	1399.0	.4770-01	.5860-01	.6710-01	.9220	.3423-02	.2436-02	.4870	3.625	538.7
105	90.000	.90700	1400.0	.3310-01	.4070-01	.4660-01	.9220	.2378-02	.1690-02	.3360	2.504	539.5
105	90.000	.91700	1401.0	.3570-01	.4380-01	.5010-01	.9220	.2555-02	.1822-02	.3660	2.728	537.6
105	90.000	.93200	1402.0	.4290-01	.5290-01	.6070-01	.9220	.3100-02	.2190-02	.4300	3.195	542.3
105	90.000	.93900	1403.0	.3850-01	.4750-01	.5460-01	.9220	.2785-02	.1966-02	.3850	2.864	542.6

IH72. OTS W/PROTUBERANCES. RIGHT SRB HI/HREF

(RVZR13)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
106	95.000	.13560	1484.0	.2777	.4269	.6105	.9220	.3118-01	.1418-01	1.500	10.66	633.2
106	95.000	.13730	1485.0	.3166	.4484	.5847	.9220	.2986-01	.1617-01	2.033	14.58	613.2
106	95.000	.13890	1486.0	.3120	.4305	.5466	.9220	.2792-01	.1594-01	2.140	15.42	604.6
106	95.000	.14560	1487.0	.1762	.2234	.2628	.9220	.1342-01	.8999-02	1.575	11.58	564.0
106	95.000	.14730	1488.0	.1279	.1587	.1835	.9220	.9371-02	.6531-02	1.242	9.203	548.7
105	104.00	.10000+00	1330.0	.2305	.2941	.3379	.9265	.1724-01	.1176-01	2.008	14.74	567.8
105	104.00	.12000	1404.0	.2942	.4330	.5885	.9220	.3003-01	.1501-01	1.729	12.34	623.4
105	104.00	.12700	1405.0	.2132	.2984	.3844	.9220	.1962-01	.1088-01	1.408	10.12	609.2
105	104.00	.13400	1406.0	.2825	.4076	.5420	.9220	.2766-01	.1442-01	1.735	12.42	618.2
105	104.00	.14100	1407.0	.2360	.3226	.4059	.9220	.2071-01	.1204-01	1.658	11.97	600.9
105	104.00	.14800	1408.0	.1036	.1280	.1474	.9220	.7521-02	.5286-02	1.025	7.609	544.7
105	104.00	.15500	1409.0	.1006	.1243	.1433	.9220	.7310-02	.5131-02	.9920	7.359	545.3
105	104.00	.16200	1410.0	.8660-01	.1071	.1234	.9220	.6299-02	.4421-02	.8540	6.341	545.3
105	104.00	.17300	1411.0	.8380-01	.1026	.1175	.9220	.5993-02	.4275-02	.8590	6.399	537.6
105	104.00	.18000	1412.0	.7610-01	.9290-01	.1060	.9220	.5410-02	.3884-02	.7930	5.918	534.4
105	104.00	.18600	1413.0	.6600-01	.8040-01	.9160-01	.9220	.4672-02	.3367-02	.6940	5.187	532.3
105	104.00	.19300	1414.0	.4900-01	.5970-01	.6810-01	.9220	.3472-02	.2502-02	.5160	3.853	532.4
105	104.00	.20000	1415.0	.4190-01	.5100-01	.5810-01	.9220	.2966-02	.2139-02	.4420	3.300	532.1
105	104.00	.25000	1416.0	.2610-01	.3150-01	.3580-01	.9220	.1825-02	.1330-02	.2820	2.152	526.2
106	112.00	.13560	1489.0	.1457	.1857	.2194	.9220	.1120-01	.7442-02	1.278	9.378	567.2
106	112.00	.13730	1490.0	.1628	.2113	.2536	.9220	.1295-01	.8316-02	1.340	9.780	577.9
106	112.00	.13890	1491.0	.1633	.2159	.2634	.9220	.1345-01	.8341-02	1.266	9.199	587.2
106	112.00	.14560	1492.0	.1456	.1832	.2142	.9220	.1094-01	.7434-02	1.337	9.853	559.1
106	112.00	.14730	1493.0	.1183	.1490	.1742	.9220	.8899-02	.6042-02	1.085	7.993	559.4
105	112.50	.74000	1417.0	.9040-01	.1186	.1437	.9220	.7333-02	.4614-02	.7170	5.221	583.2
106	112.50	.77100	1419.0	.3580-01	.4580-01	.5420-01	.9220	.2770-02	.1827-02	.3090	2.306	569.6
105	112.50	.92500	1420.0	.4240-01	.5210-01	.5960-01	.9220	.3043-02	.2166-02	.4330	3.221	538.8
105	112.50	.93200	1421.0	.4600-01	.5670-01	.6520-01	.9220	.3325-02	.2345-02	.4580	3.406	543.1
105	112.50	.93900	1422.0	.4730-01	.5840-01	.6720-01	.9220	.3428-02	.2415-02	.4710	3.497	543.6
105	112.50	.95300	1440.0	.6030-01	.7450-01	.8370-01	.9267	.4270-02	.3075-02	.5940	4.411	545.2
106	112.50	.96700	1441.0	.6480-01	.8060-01	.9090-01	.9267	.4642-02	.3310-02	.6250	4.624	550.2
106	112.50	.99400	1443.0	.4290-01	.5440-01	.6210-01	.9267	.3173-02	.2190-02	.3830	2.816	564.0
106	135.00	.80000-02	1331.0	.3470	.4588	.5434	.9258	.2775-01	.1772-01	2.687	20.56	587.3
105	135.00	.25000-01	1332.0	.3044	.4006	.4727	.9259	.2412-01	.1553-01	2.388	17.38	584.8
106	135.00	.50000-01	1333.0	.2010	.2566	.2962	.9258	.1513-01	.1026-01	1.748	12.82	568.6
105	135.00	.75000-01	1334.0	.9980-01	.1243	.1410	.9259	.7194-02	.5095-02	.9560	7.195	550.9
105	135.00	.10000+00	1335.0	.1013	.1262	.1433	.9259	.7311-02	.5167-02	.9650	7.137	551.8
105	135.00	.40000	1423.0	.2960-01	.3700-01	.4300-01	.9220	.2194-02	.1511-02	.2800	2.103	553.4
106	135.00	.92500	1424.0	.4380-01	.5460-01	.6330-01	.9220	.3234-02	.2235-02	.4170	3.086	552.2
106	140.00	.13560	1494.0	.6330-01	.7860-01	.9090-01	.9220	.4643-02	.3234-02	.6140	4.551	549.0
106	140.00	.13730	1495.0	.6450-01	.8000-01	.9260-01	.9220	.4727-02	.3293-02	.6260	4.635	548.9
106	140.00	.13890	1496.0	.6430-01	.7970-01	.9200-01	.9220	.4698-02	.3283-02	.6280	4.655	547.6
106	140.00	.14560	1497.0	.6160-01	.7590-01	.8730-01	.9220	.4458-02	.3145-02	.6150	4.571	543.3

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR13)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
106	150.00	.14230	1499.0	.5340-01	.6570-01	.7550-01	.9220	.3855-02	.2729-02	.5380	4.001	541.7
106	180.00	.80000-02	1298.0	.3381	.4493	.5280	.9273	.2697-01	.1727-01	2.577	19.69	589.7
106	180.00	.15000-01	1299.0	.1953	.2483	.2831	.9273	.1446-01	.9973-02	1.725	12.46	565.9
105	180.00	.25000-01	1300.0	.2993	.3822	.4370	.9274	.2230-01	.1527-01	2.602	18.18	568.2
106	180.00	.50000-01	1301.0	.1934	.2456	.2798	.9273	.1429-01	.9879-02	1.718	12.02	565.1
105	180.00	.75000-01	1302.0	.1105	.1379	.1554	.9274	.7928-02	.5638-02	1.047	7.259	552.8
106	180.00	.10000+00	1303.0	.1310	.1666	.1900	.9273	.9703-02	.6693-02	1.158	8.507	565.9
105	225.00	.98000	1425.0	.3040-01	.3960-01	.4420-01	.9326	.2256-02	.1550-02	.2470	1.801	579.3
105	263.00	.13600	1336.0	.5690-01	.6950-01	.7910-01	.9226	.4037-02	.2903-02	.5910	4.405	535.1
106	263.00	.20000	1472.0	.5310-01	.6450-01	.7320-01	.9226	.3738-02	.2710-02	.5630	4.209	531.1
106	263.00	.30000	1337.0	.5780-01	.7010-01	.7940-01	.9226	.4053-02	.2952-02	.6210	4.726	528.6
106	263.00	.40000	1473.0	.4070-01	.4980-01	.5670-01	.9226	.2898-02	.2079-02	.4200	3.133	536.7
106	263.00	.50000	1474.0	.3010-01	.3670-01	.4180-01	.9226	.2133-02	.1538-02	.3150	2.352	534.1
106	263.00	.60000	1475.0	.2830-01	.3450-01	.3910-01	.9226	.1996-02	.1447-02	.3010	2.248	531.1
106	263.00	.75000	1338.0	.3120-01	.3860-01	.4430-01	.9226	.2263-02	.1592-02	.3070	2.276	546.2
106	263.00	.81500	1339.0	.2580-01	.3150-01	.3590-01	.9226	.1831-02	.1316-02	.2670	1.992	535.9
106	263.00	.83700	1340.0	.2040-01	.2490-01	.2830-01	.9226	.1447-02	.1042-02	.2130	1.590	534.5
106	263.00	.88400	1341.0	.2940-01	.3640-01	.4180-01	.9226	.2136-02	.1503-02	.2900	2.151	546.0
106	263.00	.89400	1342.0	.4820-01	.5910-01	.6750-01	.9226	.3446-02	.2460-02	.4910	3.656	539.2
106	263.00	.92800	1477.0	.3650-01	.4520-01	.5210-01	.9226	.2659-02	.1862-02	.3550	2.633	548.1
105	263.00	.93900	1344.0	.4910-01	.6160-01	.7150-01	.9226	.3649-02	.2505-02	.4560	3.368	556.4
106	270.00	.80000-02	1304.0	.2501	.3141	.3351	.9377	.1711-01	.1277-01	2.318	18.32	557.5
106	270.00	.50000-01	1306.0	.2378	.3010	.3220	.9377	.1644-01	.1215-01	2.138	14.98	562.9
105	270.00	.75000-01	1307.0	.1674	.2088	.2222	.9377	.1134-01	.8541-02	1.592	11.21	552.2
106	270.00	.10000+00	1308.0	.1842	.2337	.2503	.9377	.1278-01	.9406-02	1.639	12.04	564.7
105	270.00	.11500	1345.0	.1318	.1675	.1965	.9228	.1003-01	.6726-02	1.165	8.559	565.4
105	277.00	.13600	1346.0	.5010-01	.6110-01	.6930-01	.9230	.3537-02	.2556-02	.5240	3.911	533.6
105	277.00	.30000	1347.0	.5130-01	.6200-01	.6980-01	.9230	.3564-02	.2619-02	.5620	4.287	524.0
106	277.00	.40000	1464.0	.4540-01	.5560-01	.6320-01	.9230	.3227-02	.2319-02	.4690	3.495	536.7
106	277.00	.60000	1466.0	.5200-01	.6390-01	.7280-01	.9230	.3720-02	.2656-02	.5280	3.930	540.1
106	277.00	.70000	1467.0	.5180-01	.6380-01	.7290-01	.9230	.3725-02	.2647-02	.5200	3.865	542.4
105	277.00	.75000	1348.0	.6850-01	.8530-01	.9840-01	.9230	.5020-02	.3496-02	.6550	4.845	551.3
105	277.00	.81500	1349.0	.4520-01	.5530-01	.6300-01	.9230	.3214-02	.2305-02	.4630	3.452	537.5
105	277.00	.83700	1350.0	.4560-01	.5580-01	.6350-01	.9230	.3242-02	.2327-02	.4690	3.495	537.1
105	277.00	.88400	1351.0	.9810-01	.1240	.1435	.9230	.7322-02	.5055-02	.9280	6.855	554.9
105	277.00	.89400	1352.0	.9490-01	.1171	.1340	.9230	.6839-02	.4845-02	.9450	7.017	543.6
106	277.00	.90000	1468.0	.7880-01	.9860-01	.1142	.9230	.5832-02	.4022-02	.7370	5.443	555.6
106	277.00	.90700	1353.0	.6560-01	.8280-01	.9640-01	.9230	.4923-02	.3351-02	.5970	4.396	560.8
106	277.00	.92100	1469.0	.6370-01	.7880-01	.9050-01	.9230	.4622-02	.3251-02	.6230	4.622	547.2
106	277.00	.92800	1470.0	.5610-01	.7050-01	.8170-01	.9230	.4174-02	.2866-02	.5200	3.839	557.4
106	277.00	.93700	1471.0	.7250-01	.9170-01	.1071	.9230	.5469-02	.3702-02	.6520	4.795	562.9
105	277.00	.93900	1354.0	.6000-01	.7660-01	.9000-01	.9230	.4594-02	.3062-02	.5220	3.833	568.0
106	335.00	.11000	1309.0	.2596	.3312	.3508	.9399	.1791-01	.1326-01	2.264	16.61	568.2

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
105	337.50	.74000	1355.0	.1545	.1962	.2291	.9234	.1169-01	.7884-02	1.371	10.08	564.7
105	337.50	.75000	1356.0	.1814	.2337	.2761	.9234	.1409-01	.9257-02	1.528	11.37	573.5
106	337.50	.76500	1357.0	.6600-01	.8180-01	.9370-01	.9234	.4786-02	.3370-02	.6450	4.859	547.7
106	337.50	.92500	1359.0	.8500-01	.1070	.1242	.9234	.6341-02	.4339-02	.7780	5.735	559.6
106	337.50	.93200	1360.0	.1020	.1299	.1520	.9234	.7763-02	.5208-02	.8960	6.576	566.9
106	337.50	.93900	1361.0	.1542	.1987	.2347	.9234	.1199-01	.7876-02	1.300	9.511	573.9

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

RIGHT SRB

PARAMETRIC DATA

ALPHA = -5.000 BETA = 9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
101	-4.950	9.000	4.020	72.80	733.0	173.1	.4670	5.279	2592.	.2261-03	.1394-06	4.205
102	-4.950	9.000	4.020	72.70	737.0	174.2	.4660	5.277	2600.	.2246-03	.1403-06	4.163

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
101	.5101-01	.1124-01
102	.5105-01	.1129-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
101	.00000	.25000-01	1311.0	.4128	.5551	.6079	.9374	.3101-01	.2106-01	3.009	21.48	589.8
101	.00000	.76500	1362.0	.1362	.1768	.2109	.9228	.1076-01	.6949-02	1.110	8.260	573.0
101	.00000	.83700	1364.0	.8160-01	.1028	.1198	.9228	.6112-02	.4163-02	.7380	5.452	555.3
101	.00000	.88400	1365.0	.1118	.1450	.1729	.9228	.8818-02	.5702-02	.9130	6.682	572.6
101	.00000	.90700	1366.0	.1420	.1825	.2161	.9228	.1102-01	.7243-02	1.195	8.767	567.7
101	5.0000	.75000-01	1313.0	.2830	.3635	.3941	.9364	.2010-01	.1444-01	2.387	16.96	567.3
101	15.600	.95300	1431.0	.2040	.2681	.2960	.9350	.1510-01	.1040-01	1.594	11.63	579.5
101	20.000	.75000-01	1316.0	.2750	.3538	.3911	.9333	.1995-01	.1403-01	2.308	16.39	568.1
101	20.000	.10000+00	1318.0	.2469	.3166	.3494	.9333	.1783-01	.1260-01	2.098	15.41	566.1
101	20.000	.11000	1319.0	.2398	.3069	.3384	.9333	.1726-01	.1223-01	2.050	15.06	565.1
101	20.000	.95300	1432.0	.1633	.2112	.2330	.9341	.1188-01	.8332-02	1.347	9.865	571.1
102	22.500	.72400	1367.0	.1830	.2413	.2936	.9220	.1499-01	.9340-02	1.425	10.54	584.8
101	22.500	.74000	1368.0	.2250	.3097	.3924	.9220	.2002-01	.1148-01	1.537	11.10	598.8
101	22.500	.75000	1369.0	.1607	.2487	.3585	.9220	.1829-01	.8198-02	.8490	6.043	629.1
102	22.500	.76500	1370.0	.2033	.2657	.3208	.9220	.1637-01	.1038-01	1.628	12.07	580.4
102	22.500	.77100	1371.0	.1928	.2435	.2853	.9220	.1456-01	.9844-02	1.746	12.86	560.0
101	22.500	.92500	1372.0	.7030-01	.8780-01	.1019	.9220	.5200-02	.3586-02	.6600	4.890	548.6
101	22.500	.93900	1374.0	.1193	.1522	.1798	.9220	.9173-02	.6087-02	1.033	7.602	562.9
101	24.400	.95300	1433.0	.1780	.2320	.2582	.9332	.1317-01	.9081-02	1.430	10.46	575.2
101	35.000	.75000-01	1321.0	.2821	.3632	.4089	.9305	.2086-01	.1439-01	2.361	16.76	568.6

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR14)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
101	35.000	.11000	1322.0	.1947	.2459	.2740	.9305	.1397-01	.9930-02	1.746	13.10	556.9
101	35.600	.95300	1434.0	.1155	.1479	.1655	.9311	.8441-02	.5894-02	.9860	7.243	565.4
101	40.000	.95300	1435.0	.8810-01	.1118	.1251	.9303	.6380-02	.4496-02	.7770	5.724	559.8
101	45.000	.74000	1375.0	.2425	.3373	.4319	.9220	.2203-01	.1237-01	1.613	11.83	602.3
101	45.000	.75000	1376.0	.2825	.4325	.6155	.9220	.3140-01	.1441-01	1.523	11.04	627.0
102	45.000	.76500	1377.0	.3654	.4903	.6064	.9220	.3096-01	.1865-01	2.698	19.56	592.7
102	45.000	.77100	1378.0	.2549	.3292	.3934	.9220	.2008-01	.1301-01	2.125	15.55	574.0
102	45.000	.81500	1379.0	.9790-01	.1224	.1425	.9220	.7274-02	.4995-02	.9170	6.776	553.8
102	45.000	.88400	1381.0	.4090-01	.5120-01	.5960-01	.9220	.3041-02	.2086-02	.3820	2.823	554.2
102	45.000	.90700	1382.0	.4070-01	.5060-01	.5860-01	.9220	.2992-02	.2077-02	.3900	2.892	549.3
101	65.000	.11000	1323.0	.3242	.4208	.4896	.9264	.2498-01	.1654-01	2.638	18.99	573.2
101	67.500	.74000	1383.0	.3021	.4293	.5616	.9220	.2865-01	.1541-01	1.906	13.94	609.0
101	67.500	.75000	1384.0	.5107	.8188	1.237	.9220	.6308-01	.2605-01	2.536	18.31	635.3
102	67.500	.77100	1385.0	.2723	.3652	.4514	.9220	.2304-01	.1390-01	2.014	14.60	592.4
101	76.000	.10000+00	1324.0	.2803	.3606	.4197	.9254	.2141-01	.1430-01	2.351	17.25	568.2
101	76.000	.14100	1386.0	.3996	.5444	.6830	.9220	.3484-01	.2038-01	2.807	20.32	595.0
101	76.000	.14800	1387.0	.2274	.2897	.3422	.9220	.1745-01	.1160-01	1.978	14.55	562.2
101	76.000	.15500	1388.0	.1244	.1548	.1794	.9220	.9152-02	.6345-02	1.183	8.772	546.3
101	76.000	.16200	1389.0	.1142	.1418	.1640	.9220	.8366-02	.5824-02	1.096	8.133	544.6
101	76.000	.25000	1390.0	.4460-01	.5420-01	.6150-01	.9220	.3139-02	.2276-02	.4730	3.609	524.8
101	77.500	.95300	1436.0	.3370-01	.4170-01	.4720-01	.9258	.2406-02	.1719-02	.3280	2.435	542.1
101	77.500	.99400	1439.0	.3390-01	.4280-01	.4900-01	.9258	.2501-02	.1727-02	.3040	2.240	556.9
102	90.000	.15000-01	1325.0	.3291	.4237	.4961	.9246	.2532-01	.1680-01	2.775	20.66	572.2
101	90.000	.25000-01	1326.0	.4013	.5357	.6456	.9246	.3293-01	.2047-01	2.989	21.37	586.7
102	90.000	.40000-01	1327.0	.3232	.4185	.4922	.9246	.2513-01	.1650-01	2.671	19.53	575.5
101	90.000	.60000-01	1328.0	.2543	.3219	.3721	.9246	.1898-01	.1297-01	2.263	15.64	558.2
101	90.000	.75000-01	1329.0	.1594	.1982	.2261	.9246	.1153-01	.8132-02	1.524	10.44	545.3
102	90.000	.13390	1480.0	.2426	.4737	1.015	.9220	.5182-01	.1239-01	.9360	6.561	661.8
102	90.000	.13560	1481.0	.4743	.8142	1.360	.9220	.6941-01	.2421-01	2.139	15.08	649.0
102	90.000	.13730	1482.0	.5943	.8985	1.260	.9220	.6430-01	.3034-01	3.303	23.53	628.5
102	90.000	.13890	1483.0	.4926	.6884	.8854	.9220	.4520-01	.2515-01	3.260	23.45	607.7
102	90.000	.55000	1391.0	.8860-01	.1104	.1280	.9220	.6532-02	.4524-02	.8470	6.267	550.2
102	90.000	.65000	1392.0	.6740-01	.8400-01	.9740-01	.9220	.4971-02	.3440-02	.6420	4.753	550.7
101	90.000	.74000	1393.0	.2460-01	.3090-01	.3610-01	.9220	.1840-02	.1254-02	.2230	1.689	553.4
101	90.000	.76500	1394.0	.1880	.2399	.2839	.9220	.1448-01	.9589-02	1.622	11.93	563.5
101	90.000	.77100	1395.0	.1374	.1741	.2047	.9220	.1044-01	.7011-02	1.220	8.990	558.7
101	90.000	.81500	1396.0	.1500-01	.1870-01	.2170-01	.9220	.1108-02	.7665-03	.1420	1.073	547.1
101	90.000	.83700	1397.0	.1020-01	.1270-01	.1470-01	.9220	.7488-03	.5189-03	.9700-01	.7160	546.6
101	90.000	.88400	1398.0	.1910-01	.2370-01	.2740-01	.9220	.1398-02	.9744-03	.1840	1.365	544.0
101	90.000	.89400	1399.0	.4760-01	.5870-01	.6760-01	.9220	.3449-02	.2427-02	.4680	3.484	539.8
101	90.000	.90700	1400.0	.3130-01	.3860-01	.4440-01	.9220	.2267-02	.1598-02	.3090	2.303	539.1
101	90.000	.91700	1401.0	.3850-01	.4740-01	.5440-01	.9220	.2776-02	.1963-02	.3830	2.856	537.4
101	90.000	.93200	1402.0	.3450-01	.4260-01	.4910-01	.9220	.2505-02	.1759-02	.3380	2.511	540.8

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR14)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
101	90.000	.93900	1403.0	.2900-01	.3590-01	.4140-01	.9220	.2113-02	.1481-02	.2830	2.106	541.5
102	95.000	.13560	1484.0	.3145	.4822	.6877	.9220	.3510-01	.1605-01	1.701	12.10	631.4
102	95.000	.13730	1485.0	.4061	.5788	.7598	.9220	.3878-01	.2073-01	2.562	18.37	613.8
102	95.000	.13890	1486.0	.3488	.4882	.6290	.9220	.3211-01	.1781-01	2.299	16.53	608.3
102	95.000	.14560	1487.0	.1902	.2523	.2978	.9220	.1520-01	.1012-01	1.739	12.78	565.4
102	95.000	.14730	1488.0	.1474	.1839	.2135	.9220	.1090-01	.7522-02	1.396	10.33	551.8
101	104.00	.10000+00	1330.0	.2804	.3634	.4291	.9241	.2189-01	.1431-01	2.295	16.81	572.2
101	104.00	.12000	1404.0	.2580	.3808	.5190	.9220	.2648-01	.1316-01	1.496	10.70	619.0
101	104.00	.12700	1405.0	.2171	.3039	.3915	.9220	.1997-01	.1107-01	1.420	10.24	604.4
101	104.00	.13400	1406.0	.3482	.5049	.6750	.9220	.3443-01	.1776-01	2.097	15.03	614.6
101	104.00	.14100	1407.0	.3136	.4311	.5454	.9220	.2782-01	.1600-01	2.152	15.55	598.2
101	104.00	.14800	1408.0	.1348	.1675	.1939	.9220	.9889-02	.6878-02	1.291	9.584	545.0
101	104.00	.15500	1409.0	.1200	.1486	.1715	.9220	.8750-02	.6124-02	1.166	8.665	542.3
101	104.00	.16200	1410.0	.9490-01	.1175	.1357	.9220	.6922-02	.4840-02	.9200	6.837	542.6
101	104.00	.17300	1411.0	.9880-01	.1217	.1399	.9220	.7138-02	.5040-02	.9800	7.297	538.3
101	104.00	.18000	1412.0	.8080-01	.9920-01	.1137	.9220	.5799-02	.4122-02	.8150	6.080	535.0
101	104.00	.18600	1413.0	.6680-01	.8180-01	.9350-01	.9220	.4770-02	.3407-02	.6810	5.087	532.7
101	104.00	.19300	1414.0	.5360-01	.6560-01	.7500-01	.9220	.3825-02	.2733-02	.5470	4.088	532.5
101	104.00	.20000	1415.0	.4540-01	.5550-01	.6350-01	.9220	.3237-02	.2315-02	.4640	3.470	532.0
101	104.00	.25000	1416.0	.2930-01	.3560-01	.4040-01	.9220	.2063-02	.1494-02	.3100	2.361	525.4
102	112.00	.13560	1489.0	.1553	.1996	.2375	.9220	.1213-01	.7926-02	1.316	9.640	571.3
102	112.00	.13730	1490.0	.1665	.2178	.2632	.9220	.1344-01	.8501-02	1.331	9.707	580.7
102	112.00	.13890	1491.0	.1682	.2234	.2736	.9220	.1397-01	.8586-02	1.282	9.314	588.0
102	112.00	.14560	1492.0	.1585	.2001	.2345	.9220	.1197-01	.8089-02	1.435	10.57	560.0
102	112.00	.14730	1493.0	.1426	.1799	.2108	.9220	.1076-01	.7278-02	1.293	9.527	559.7
101	112.50	.74000	1417.0	.1083	.1416	.1711	.9220	.8728-02	.5525-02	.8600	6.284	577.0
101	112.50	.75000	1418.0	.1115	.1485	.1825	.9220	.9309-02	.5688-02	.8360	6.077	585.8
102	112.50	.77100	1419.0	.7170-01	.9030-01	.1057	.9220	.5394-02	.3661-02	.6550	4.912	558.4
101	112.50	.92500	1420.0	.3740-01	.4610-01	.5300-01	.9220	.2705-02	.1908-02	.3700	2.757	538.7
101	112.50	.93200	1421.0	.4020-01	.4980-01	.5740-01	.9220	.2930-02	.2052-02	.3920	2.911	541.9
101	112.50	.93900	1422.0	.3190-01	.3950-01	.4560-01	.9220	.2324-02	.1629-02	.3110	2.314	541.6
101	112.50	.95300	1440.0	.2780-01	.3450-01	.3930-01	.9243	.2004-02	.1419-02	.2700	2.005	542.6
102	112.50	.96700	1441.0	.4250-01	.5260-01	.5990-01	.9243	.3058-02	.2172-02	.4180	3.104	544.8
102	112.50	.99400	1443.0	.4170-01	.5260-01	.6090-01	.9243	.3108-02	.2126-02	.3760	2.765	560.7
102	135.00	.80000-02	1331.0	.3768	.4962	.5934	.9242	.3029-01	.1923-01	2.946	22.57	584.2
101	135.00	.25000-01	1332.0	.3168	.4155	.4952	.9242	.2526-01	.1616-01	2.494	18.20	578.4
102	135.00	.50000-01	1333.0	.2251	.2878	.3362	.9242	.1716-01	.1149-01	1.943	14.25	568.3
101	135.00	.75000-01	1334.0	.1241	.1541	.1761	.9242	.8983-02	.6332-02	1.192	9.001	544.4
101	135.00	.10000+00	1335.0	.1266	.1572	.1796	.9242	.9159-02	.6458-02	1.217	9.035	544.3
101	135.00	.40000	1423.0	.5140-01	.6420-01	.7470-01	.9220	.3810-02	.2623-02	.4810	3.623	549.3
102	135.00	.92500	1424.0	.2890-01	.3600-01	.4160-01	.9220	.2125-02	.1477-02	.2790	2.066	548.6
102	140.00	.13560	1494.0	.7520-01	.9400-01	.1093	.9220	.5577-02	.3840-02	.7090	5.242	552.7
102	140.00	.13730	1495.0	.7570-01	.9470-01	.1102	.9220	.5625-02	.3864-02	.7100	5.246	553.7

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR14)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
102	140.00	.13890	1496.0	.7510-01	.9390-01	.1092	.9220	.5572-02	.3832-02	.7050	5.214	553.2
102	140.00	.14560	1497.0	.7590-01	.9430-01	.1091	.9220	.5568-02	.3873-02	.7320	5.423	548.4
102	150.00	.14230	1499.0	.6960-01	.8630-01	.9970-01	.9220	.5087-02	.3553-02	.6780	5.027	546.6
102	180.00	.80000-02	1298.0	.3816	.5052	.5925	.9273	.3024-01	.1948-01	2.934	22.45	586.7
102	180.00	.15000-01	1299.0	.2210	.2791	.3170	.9273	.1618-01	.1128-01	1.998	14.48	560.3
101	180.00	.25000-01	1300.0	.3337	.4252	.4856	.9273	.2477-01	.1703-01	2.901	20.33	562.3
102	180.00	.50000-01	1301.0	.2236	.2840	.3237	.9273	.1652-01	.1141-01	1.980	13.86	563.9
101	180.00	.75000-01	1302.0	.1457	.1811	.2036	.9273	.1039-01	.7432-02	1.392	9.685	545.4
102	180.00	.10000+00	1303.0	.1519	.1930	.2201	.9273	.1124-01	.7755-02	1.343	9.870	564.2
101	225.00	.98000	1425.0	.5990-01	.7770-01	.8490-01	.9357	.4331-02	.3055-02	.4890	3.579	572.6
101	225.00	.99400	1426.0	.7640-01	.9890-01	.1079	.9357	.5506-02	.3898-02	.6290	4.609	571.3
101	263.00	.13600	1336.0	.7630-01	.9440-01	.1075	.9242	.5484-02	.3892-02	.7440	5.535	541.4
102	263.00	.20000	1472.0	.6710-01	.8220-01	.9300-01	.9242	.4747-02	.3424-02	.6860	5.115	536.9
102	263.00	.30000	1337.0	.6770-01	.8290-01	.9370-01	.9242	.4785-02	.3457-02	.6960	5.281	535.9
102	263.00	.40000	1473.0	.4560-01	.5620-01	.6390-01	.9242	.3260-02	.2329-02	.4550	3.385	541.8
102	263.00	.50000	1474.0	.3500-01	.4300-01	.4870-01	.9242	.2485-02	.1788-02	.3560	2.650	538.3
102	263.00	.60000	1475.0	.3540-01	.4320-01	.4880-01	.9242	.2493-02	.1805-02	.3650	2.727	534.9
102	263.00	.75000	1338.0	.3870-01	.4810-01	.5500-01	.9242	.2808-02	.1977-02	.3730	2.762	548.8
102	263.00	.81500	1339.0	.2520-01	.3080-01	.3490-01	.9242	.1780-02	.1284-02	.2580	1.920	536.8
102	263.00	.83700	1340.0	.2090-01	.2550-01	.2890-01	.9242	.1474-02	.1065-02	.2140	1.599	536.0
102	263.00	.88400	1341.0	.3760-01	.4660-01	.5300-01	.9242	.2708-02	.1920-02	.3690	2.738	545.2
102	263.00	.89400	1342.0	.4030-01	.4970-01	.5640-01	.9242	.2881-02	.2058-02	.4020	2.992	541.8
102	263.00	.92800	1477.0	.3440-01	.4280-01	.4890-01	.9242	.2495-02	.1757-02	.3320	2.458	548.5
101	263.00	.93900	1344.0	.5370-01	.6780-01	.7830-01	.9242	.3994-02	.2740-02	.4850	3.577	555.8
102	270.00	.80000-02	1304.0	.2663	.3374	.3502	.9431	.1788-01	.1359-01	2.381	18.77	562.2
102	270.00	.50000-01	1306.0	.2693	.3446	.3584	.9431	.1830-01	.1375-01	2.319	16.20	568.6
101	270.00	.75000-01	1307.0	.1969	.2475	.2565	.9431	.1309-01	.1004-01	1.798	12.66	553.6
102	270.00	.10000+00	1308.0	.2160	.2773	.2886	.9431	.1473-01	.1102-01	1.838	13.47	570.6
101	270.00	.11500	1345.0	.1507	.1944	.2278	.9246	.1162-01	.7690-02	1.256	9.206	569.4
101	277.00	.13600	1346.0	.6400-01	.7870-01	.8900-01	.9249	.4539-02	.3264-02	.6390	4.765	536.8
101	277.00	.30000	1347.0	.6270-01	.7650-01	.8590-01	.9249	.4383-02	.3198-02	.6510	4.951	529.2
102	277.00	.40000	1464.0	.5540-01	.6840-01	.7740-01	.9249	.3953-02	.2830-02	.5520	4.102	542.4
102	277.00	.60000	1466.0	.5840-01	.7200-01	.8150-01	.9249	.4158-02	.2980-02	.5820	4.330	541.9
102	277.00	.70000	1467.0	.6000-01	.7410-01	.8410-01	.9249	.4292-02	.3063-02	.5920	4.399	544.0
101	277.00	.75000	1348.0	.8260-01	.1035	.1185	.9249	.6044-02	.4215-02	.7660	5.669	550.9
101	277.00	.81500	1349.0	.5420-01	.6670-01	.7550-01	.9249	.3853-02	.2764-02	.5380	4.009	538.0
101	277.00	.83700	1350.0	.5820-01	.7190-01	.8160-01	.9249	.4160-02	.2967-02	.5690	4.233	540.9
101	277.00	.88400	1351.0	.1206	.1529	.1767	.9249	.9012-02	.6151-02	1.066	7.854	559.4
101	277.00	.89400	1352.0	.1096	.1366	.1559	.9249	.7953-02	.5592-02	1.036	7.683	547.3
102	277.00	.90000	1468.0	.1094	.1383	.1594	.9249	.8139-02	.5586-02	.9860	7.260	560.8
102	277.00	.90700	1353.0	.1105	.1405	.1626	.9249	.8299-02	.5643-02	.9760	7.175	564.4
102	277.00	.92100	1469.0	.7990-01	.9940-01	.1132	.9249	.7781-02	.4980-02	.7680	5.688	549.1
102	277.00	.92800	1470.0	.8290-01	.1044	.1199	.9249	.8121-02	.5244-02	.7810	5.610	557.7

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR14)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
102	277.00	.93700	1471.0	.1086	.1380	.1596	.9249	.8149-02	.5542-02	.9590	7.050	564.3
101	277.00	.93900	1354.0	.1090	.1397	.1627	.9249	.8299-02	.5561-02	.9270	6.810	565.9
102	335.00	.11000	1309.0	.2812	.3651	.3833	.9420	.1957-01	.1435-01	2.304	16.83	576.9
101	337.50	.74000	1355.0	.1960	.2551	.3024	.9241	.1543-01	.1000-01	1.582	11.57	574.5
101	337.50	.75000	1356.0	.2369	.3134	.3764	.9241	.1920-01	.1209-01	1.815	13.45	582.5
102	337.50	.76500	1357.0	.8650-01	.1085	.1251	.9241	.6386-02	.4415-02	.8010	6.013	555.9
102	337.50	.92500	1359.0	.1121	.1421	.1651	.9241	.8426-02	.5724-02	.9990	7.352	562.8
102	337.50	.93200	1360.0	.1291	.1661	.1951	.9241	.9959-02	.6592-02	1.092	7.997	571.7
102	337.50	.93900	1361.0	.1687	.2200	.2613	.9241	.1334-01	.8612-02	1.361	9.928	579.3

RIGHT SRB

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

PARAMETRIC DATA

ALPHA = .0000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
95	-.3000-01	-9.100	4.020	72.70	753.0	178.0	.4660	5.276	2628.	.2198-03	.1433-06	4.030
96	-.3000-01	-9.100	4.020	72.70	752.0	177.7	.4660	5.277	2626.	.2202-03	.1431-06	4.041

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
95	.5119-01	.1144-01
96	.5119-01	.1143-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
95	.00000	.25000-01	1311.0	.1594	.2086	.2350	.9318	.1203-01	.8162-02	1.304	9.293	593.6
95	.00000	.76500	1362.0	.6590-01	.8220-01	.9550-01	.9220	.4889-02	.3371-02	.6380	4.770	564.1
95	.00000	.83700	1364.0	.1630-01	.2010-01	.2320-01	.9220	.1188-02	.8339-03	.1650	1.215	556.1
95	.00000	.88400	1365.0	.5260-01	.6580-01	.7650-01	.9220	.3918-02	.2694-02	.5070	3.725	565.2
95	.00000	.90700	1366.0	.4670-01	.5840-01	.6780-01	.9220	.3472-02	.2392-02	.4520	3.319	564.6
95	5.0000	.75000-01	1313.0	.9610-01	.1214	.1336	.9326	.6839-02	.4917-02	.8880	6.293	572.7
95	20.000	.75000-01	1316.0	.1001	.1278	.1392	.9353	.7127-02	.5122-02	.8880	6.268	580.0
95	20.000	.10000+00	1318.0	.9140-01	.1173	.1281	.9353	.6555-02	.4678-02	.7970	5.802	583.1
95	20.000	.11000	1319.0	.1101	.1422	.1555	.9353	.7962-02	.5637-02	.9410	6.845	586.4
95	20.000	.95300	1432.0	.8920-01	.1125	.1214	.9360	.6214-02	.4567-02	.8300	6.081	571.6
96	22.500	.72400	1367.0	.7300-01	.9290-01	.1093	.9224	.5596-02	.3736-02	.6560	4.874	576.6
95	22.500	.74000	1368.0	.1151	.1484	.1766	.9224	.9043-02	.5891-02	.9880	7.185	585.7
95	22.500	.75000	1369.0	.1519	.1993	.2406	.9224	.1232-01	.7778-02	1.234	8.931	594.8
96	22.500	.76500	1370.0	.9080-01	.1137	.1322	.9224	.6764-02	.4649-02	.8670	6.481	565.6
96	22.500	.77100	1371.0	.5480-01	.6760-01	.7760-01	.9224	.3972-02	.2804-02	.5560	4.111	553.7
95	22.500	.92500	1372.0	.3110-01	.3880-01	.4490-01	.9224	.2296-02	.1593-02	.3040	2.237	562.5
95	22.500	.93900	1374.0	.5290-01	.6590-01	.7630-01	.9224	.3905-02	.2707-02	.5160	3.796	562.8
95	24.400	.95300	1433.0	.9760-01	.1227	.1316	.9369	.6737-02	.4996-02	.9200	6.746	569.3
95	35.000	.75000-01	1321.0	.1018	.1306	.1402	.9379	.7179-02	.5213-02	.8910	6.279	582.5
95	35.000	.11000	1322.0	.1123	.1442	.1548	.9379	.7927-02	.5746-02	.9780	7.246	583.2

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR15)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
95	35.600	.95300	1434.0	.9580-01	.1213	.1290	.9389	.6603-02	.4904-02	.8780	6.424	574.3
95	40.000	.95300	1435.0	.9760-01	.1241	.1315	.9396	.6733-02	.4998-02	.8830	6.450	576.8
95	45.000	.74000	1375.0	.1506	.1943	.2300	.9234	.1177-01	.7708-02	1.289	9.529	586.2
95	45.000	.75000	1376.0	.2978	.4015	.4929	.9234	.2523-01	.1525-01	2.224	16.28	607.5
96	45.000	.76500	1377.0	.9350-01	.1177	.1365	.9234	.6989-02	.4785-02	.8750	6.415	569.3
96	45.000	.77100	1378.0	.4710-01	.5890-01	.6800-01	.9234	.3483-02	.2409-02	.4510	3.310	565.2
96	45.000	.81500	1379.0	.3470-01	.4320-01	.4970-01	.9234	.2546-02	.1774-02	.3370	2.483	562.0
96	45.000	.88400	1381.0	.4200-01	.5210-01	.5970-01	.9234	.3057-02	.2150-02	.4180	3.080	557.9
96	45.000	.90700	1382.0	.4120-01	.5100-01	.5840-01	.9234	.2988-02	.2109-02	.4140	3.052	556.1
95	65.000	.11000	1323.0	.1201	.1526	.1594	.9421	.8161-02	.6147-02	1.087	7.809	576.6
95	67.500	.74000	1383.0	.1158	.1509	.1788	.9243	.9154-02	.5926-02	.9590	7.070	591.6
95	67.500	.75000	1384.0	.1880	.2568	.3165	.9243	.1620-01	.9623-02	1.352	9.868	612.9
96	67.500	.77100	1385.0	.7750-01	.9830-01	.1142	.9243	.5844-02	.3965-02	.7020	5.136	575.0
95	76.000	.10000+00	1324.0	.1111	.1414	.1471	.9430	.7528-02	.5688-02	1.000	7.303	577.6
95	76.000	.14100	1386.0	.1187	.1539	.1814	.9245	.9284-02	.6078-02	1.001	7.269	588.7
95	76.000	.14800	1387.0	.7470-01	.9340-01	.1071	.9245	.5482-02	.3822-02	.7180	5.273	565.6
95	76.000	.15500	1388.0	.4990-01	.6160-01	.7000-01	.9245	.3583-02	.2552-02	.5050	3.725	555.7
95	76.000	.16200	1389.0	.3950-01	.4860-01	.5510-01	.9245	.2821-02	.2020-02	.4050	2.993	553.0
95	76.000	.25000	1390.0	.6500-02	.7900-02	.8900-02	.9245	.4568-03	.3316-03	.6900-01	.5190	545.8
95	77.500	.95300	1436.0	.4410-01	.5670-01	.5870-01	.9440	.3003-02	.2257-02	.3830	2.789	583.6
95	77.500	.99400	1439.0	.3530-01	.4640-01	.4820-01	.9440	.2467-02	.1808-02	.2860	2.068	595.4
96	90.000	.15000-01	1325.0	.2534	.3374	.3530	.9434	.1807-01	.1297-01	1.958	14.37	601.2
95	90.000	.25000-01	1326.0	.2544	.3472	.3649	.9434	.1868-01	.1302-01	1.834	12.95	612.6
96	90.000	.40000-01	1327.0	.1849	.2425	.2530	.9434	.1295-01	.9466-02	1.499	10.86	593.8
95	90.000	.60000-01	1328.0	.1529	.1966	.2044	.9434	.1046-01	.7825-02	1.324	9.036	584.2
95	90.000	.75000-01	1329.0	.9660-01	.1208	.1249	.9434	.6395-02	.4943-02	.9290	6.301	565.4
96	90.000	.13230	1479.0	.2922	.5461	.9760	.9247	.4996-01	.1495-01	1.210	8.440	671.3
96	90.000	.13390	1480.0	.2790	.5060	.8610	.9247	.4407-01	.1428-01	1.197	8.367	668.3
96	90.000	.13560	1481.0	.2654	.4128	.5745	.9247	.2940-01	.1359-01	1.431	10.10	646.8
96	90.000	.13730	1482.0	.1958	.2645	.3216	.9247	.1646-01	.1002-01	1.452	10.45	607.3
96	90.000	.13890	1483.0	.1438	.1823	.2111	.9247	.1080-01	.7358-02	1.307	9.562	574.5
96	90.000	.55000	1391.0	.5510-01	.6800-01	.7710-01	.9247	.3945-02	.2821-02	.5610	4.145	553.3
96	90.000	.65000	1392.0	.4230-01	.5230-01	.5950-01	.9247	.3044-02	.2165-02	.4250	3.137	555.9
95	90.000	.74000	1393.0	.1770-01	.2170-01	.2460-01	.9247	.1259-02	.9043-03	.1820	1.370	552.0
95	90.000	.76500	1394.0	.9480-01	.1204	.1394	.9247	.7138-02	.4851-02	.8590	6.279	576.3
95	90.000	.77100	1395.0	.5280-01	.6680-01	.7720-01	.9247	.3952-02	.2704-02	.4860	3.557	573.6
95	90.000	.81500	1396.0	.3910-01	.4910-01	.5640-01	.9247	.2886-02	.2002-02	.3710	2.770	568.0
95	90,000	.83700	1397.0	.3110-01	.3880-01	.4440-01	.9247	.2272-02	.1590-02	.3010	2.213	564.2
95	90.000	.88400	1398.0	.2310-01	.2880-01	.3290-01	.9247	.1685-02	.1183-02	.2260	1.660	562.7
95	90.000	.89400	1399.0	.2830-01	.3520-01	.4030-01	.9247	.2062-02	.1447-02	.2750	2.023	563.3
95	90.000	.90700	1400.0	.2120-01	.2650-01	.3050-01	.9247	.1560-02	.1083-02	.2010	1.476	567.7
95	90.000	.91700	1401.0	.2040-01	.2560-01	.2950-01	.9247	.1509-02	.1045-02	.1930	1.416	568.7
95	90.000	.93200	1402.0	.1850-01	.2350-01	.2720-01	.9247	.1392-02	.9451-03	.1670	1.221	576.5

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR15)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
95	90.000	.93900	1403.0	.1940-01	.2470-01	.2870-01	.9247	.1470-02	.9934-03	.1740	1.269	578.4
96	95.000	.13560	1484.0	.2338	.3541	.4790	.9246	.2452-01	.1197-01	1.325	9.381	641.4
96	95.000	.13730	1485.0	.2176	.3037	.3800	.9246	.1945-01	.1114-01	1.477	10.57	619.5
96	95.000	.13890	1486.0	.1805	.2404	.2892	.9246	.1480-01	.9238-02	1.393	10.06	601.4
96	95.000	.14560	1487.0	.1150	.1454	.1679	.9246	.8595-02	.5889-02	1.060	7.762	572.2
96	95.000	.14730	1488.0	.7800-01	.9630-01	.1093	.9246	.5596-02	.3994-02	.7910	5.843	554.2
95	104.00	.10000+00	1330.0	.1044	.1330	.1383	.9429	.7082-02	.5343-02	.9360	6.830	578.3
95	104.00	.12000	1404.0	.2063	.2980	.3853	.9245	.1972-01	.1056-01	1.294	9.205	630.9
95	104.00	.12700	1405.0	.2095	.2967	.3767	.9245	.1928-01	.1073-01	1.375	9.811	625.2
95	104.00	.13400	1406.0	.2087	.3007	.3879	.9245	.1986-01	.1068-01	1.315	9.359	630.3
95	104.00	.14100	1407.0	.1927	.2646	.3268	.9245	.1673-01	.9862-02	1.367	9.800	614.8
95	104.00	.14800	1408.0	.7450-01	.9280-01	.1061	.9245	.5429-02	.3815-02	.7300	5.370	562.1
95	104.00	.15500	1409.0	.7440-01	.9250-01	.1056	.9245	.5404-02	.3810-02	.7350	5.410	560.6
95	104.00	.16200	1410.0	.7320-01	.9130-01	.1046	.9245	.5355-02	.3745-02	.7080	5.208	564.2
95	104.00	.17300	1411.0	.5910-01	.7340-01	.8380-01	.9245	.4289-02	.3023-02	.5820	4.289	560.7
95	104.00	.18000	1412.0	.4730-01	.5850-01	.6650-01	.9245	.3406-02	.2422-02	.4770	3.517	556.6
95	104.00	.18600	1413.0	.3850-01	.4740-01	.5390-01	.9245	.2757-02	.1969-02	.3920	2.897	554.3
95	104.00	.19300	1414.0	.3190-01	.3930-01	.4460-01	.9245	.2282-02	.1631-02	.3260	2.407	553.8
95	104.00	.20000	1415.0	.2820-01	.3480-01	.3960-01	.9245	.2025-02	.1444-02	.2870	2.116	555.0
95	104.00	.25000	1416.0	.2630-01	.3250-01	.3690-01	.9245	.1888-02	.1347-02	.2670	2.006	555.0
96	112.00	.13560	1489.0	.9030-01	.1135	.1309	.9243	.6699-02	.4621-02	.8480	6.223	568.6
96	112.00	.13730	1490.0	.9320-01	.1184	.1375	.9243	.7038-02	.4768-02	.8420	6.156	575.6
96	112.00	.13890	1491.0	.9510-01	.1217	.1422	.9243	.7277-02	.4870-02	.8390	6.117	580.0
96	112.00	.14560	1492.0	.9080-01	.1136	.1305	.9243	.6682-02	.4647-02	.8690	6.386	565.2
96	112.00	.14730	1493.0	.8800-01	.1107	.1277	.9243	.6534-02	.4504-02	.8260	6.056	568.9
95	112.50	.74000	1417.0	.1145	.1481	.1743	.9243	.8925-02	.5864-02	.9750	7.090	587.1
95	112.50	.75000	1418.0	.1543	.2021	.2405	.9243	.1231-01	.7899-02	1.258	9.108	594.2
96	112.50	.77100	1419.0	.5730-01	.7180-01	.8260-01	.9243	.4226-02	.2935-02	.5470	4.089	565.7
95	112.50	.92500	1420.0	.2390-01	.3010-01	.3470-01	.9243	.1779-02	.1225-02	.2250	1.646	570.1
95	112.50	.93200	1421.0	.2250-01	.2860-01	.3320-01	.9243	.1700-02	.1152-02	.2040	1.491	576.4
95	112.50	.93900	1422.0	.2370-01	.3020-01	.3510-01	.9243	.1798-02	.1214-02	.2130	1.557	577.8
95	112.50	.95300	1440.0	.3910-01	.5000-01	.5190-01	.9433	.2659-02	.2002-02	.3460	2.523	580.5
96	112.50	.96700	1441.0	.5420-01	.6830-01	.7080-01	.9433	.3623-02	.2774-02	.5050	3.705	570.0
96	112.50	.99400	1443.0	.4540-01	.5760-01	.5980-01	.9433	.3061-02	.2323-02	.4110	3.006	575.2
96	135.00	.80000-02	1331.0	.2828	.3907	.4248	.9395	.2174-01	.1448-01	1.972	14.88	615.9
95	135.00	.25000-01	1332.0	.2236	.3024	.3267	.9395	.1672-01	.1144-01	1.653	11.89	608.9
96	135.00	.50000-01	1333.0	.1705	.2212	.2360	.9395	.1208-01	.8728-02	1.433	10.41	588.0
95	135.00	.75000-01	1334.0	.8190-01	.1032	.1092	.9395	.5592-02	.4192-02	.7640	5.689	571.2
95	135.00	.10000+00	1335.0	.1121	.1422	.1508	.9395	.7719-02	.5738-02	1.019	7.451	575.7
95	135.00	.40000	1423.0	.6550-01	.8220-01	.9510-01	.9233	.4868-02	.3352-02	.6210	4.636	568.0
96	135.00	.92500	1424.0	.2950-01	.3720-01	.4320-01	.9233	.2213-02	.1510-02	.2740	2.009	570.6
96	140.00	.13560	1494.0	.6410-01	.8050-01	.9320-01	.9231	.4771-02	.3283-02	.6090	4.471	566.7
96	140.00	.13730	1495.0	.5630-01	.7060-01	.8180-01	.9231	.4185-02	.2884-02	.5360	3.938	566.2

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR15)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
96	140.00	.13890	1496.0	.4770-01	.5950-01	.6850-01	.9231	.3507-02	.2443-02	.4660	3.429	561.5
96	140.00	.14560	1497.0	.4130-01	.5100-01	.5830-01	.9231	.2982-02	.2116-02	.4210	3.113	553.1
96	150.00	.14230	1499.0	.4230-01	.5240-01	.6030-01	.9227	.3088-02	.2163-02	.4200	3.100	557.9
96	180.00	.80000-02	1298.0	.2692	.3681	.4252	.9317	.2177-01	.1378-01	1.928	14.57	612.2
96	180.00	.15000-01	1299.0	.2033	.2615	.2920	.9317	.1495-01	.1041-01	1.759	12.60	583.2
95	180.00	.25000-01	1300.0	.2315	.3026	.3409	.9317	.1745-01	.1185-01	1.899	13.10	593.2
96	180.00	.50000-01	1301.0	.1418	.1800	.1996	.9317	.1022-01	.7259-02	1.288	8.967	574.8
95	180.00	.75000-01	1302.0	.9500-01	.1196	.1321	.9317	.6765-02	.4861-02	.8880	6.103	570.6
96	180.00	.10000+00	1303.0	.1127	.1447	.1614	.9317	.8261-02	.5771-02	.9830	7.165	581.8
95	225.00	.98000	1425.0	.9380-01	.1200	.1379	.9267	.7059-02	.4802-02	.8290	6.046	580.7
95	225.00	.99400	1426.0	.8480-01	.1084	.1246	.9267	.6379-02	.4344-02	.7520	5.483	580.3
95	263.00	.13600	1336.0	.2370-01	.2900-01	.3310-01	.9220	.1696-02	.1214-02	.2510	1.860	546.8
96	263.00	.20000	1472.0	.1950-01	.2360-01	.2680-01	.9220	.1371-02	.1000-02	.2170	1.618	535.3
96	263.00	.30000	1337.0	.2730-01	.3320-01	.3760-01	.9220	.1927-02	.1399-02	.3000	2.271	538.0
96	263.00	.40000	1473.0	.2300-01	.2820-01	.3230-01	.9220	.1656-02	.1178-02	.2400	1.775	548.8
96	263.00	.50000	1474.0	.3760-01	.4620-01	.5300-01	.9220	.2714-02	.1922-02	.3870	2.861	551.1
96	263.00	.60000	1475.0	.3860-01	.4720-01	.5410-01	.9220	.2767-02	.1973-02	.4040	2.992	547.6
96	263.00	.75000	1338.0	.6770-01	.8470-01	.9860-01	.9220	.5047-02	.3465-02	.6490	4.769	564.9
96	263.00	.81500	1339.0	.4640-01	.5690-01	.6510-01	.9220	.3334-02	.2375-02	.4840	3.589	548.2
96	263.00	.83700	1340.0	.3990-01	.4890-01	.5580-01	.9220	.2857-02	.2044-02	.4220	3.128	546.0
96	263.00	.88400	1341.0	.5890-01	.7300-01	.8430-01	.9220	.4316-02	.3016-02	.5870	4.332	557.4
96	263.00	.89400	1342.0	.5700-01	.6970-01	.7960-01	.9220	.4074-02	.2915-02	.6010	4.461	545.9
96	263.00	.92800	1477.0	.5230-01	.6460-01	.7430-01	.9220	.3803-02	.2679-02	.5320	3.929	553.7
95	263.00	.93900	1344.0	.9540-01	.1196	.1394	.9220	.7135-02	.4882-02	.9090	6.670	567.3
96	270.00	.80000-02	1304.0	.1653	.2088	.2411	.9246	.1234-01	.8462-02	1.527	11.98	571.8
96	270.00	.50000-01	1306.0	.7810-01	.9700-01	.1107	.9246	.5668-02	.3996-02	.7680	5.391	559.9
95	270.00	.75000-01	1307.0	.6560-01	.8130-01	.9260-01	.9246	.4741-02	.3357-02	.6530	4.586	558.8
96	270.00	.10000+00	1308.0	.7040-01	.8770-01	.1003	.9246	.5136-02	.3601-02	.6840	5.030	562.3
95	270.00	.11500	1345.0	.6170-01	.7730-01	.9000-01	.9220	.4608-02	.3158-02	.5900	4.330	566.7
95	277.00	.13600	1346.0	.2050-01	.2500-01	.2860-01	.9220	.1466-02	.1047-02	.2150	1.597	547.7
95	277.00	.30000	1347.0	.2950-01	.3600-01	.4100-01	.9220	.2099-02	.1512-02	.3170	2.398	543.4
96	277.00	.40000	1464.0	.2420-01	.2960-01	.3390-01	.9220	.1735-02	.1237-02	.2530	1.874	547.8
96	277.00	.60000	1466.0	.3410-01	.4170-01	.4760-01	.9220	.2438-02	.1745-02	.3600	2.672	545.8
96	277.00	.70000	1467.0	.2270-01	.2780-01	.3180-01	.9220	.1627-02	.1160-02	.2370	1.758	547.8
95	277.00	.75000	1348.0	.4370-01	.5440-01	.6300-01	.9220	.3224-02	.2237-02	.4300	3.162	561.4
95	277.00	.11500	1349.0	.4500-01	.5540-01	.6370-01	.9220	.3259-02	.2304-02	.4620	3.419	552.7
95	277.00	.83700	1350.0	.4180-01	.5130-01	.5890-01	.9220	.3017-02	.2137-02	.4310	3.187	551.8
95	277.00	.88400	1351.0	.6610-01	.8190-01	.9460-01	.9220	.4841-02	.3384-02	.6610	4.874	558.1
95	277.00	.89400	1352.0	.4600-01	.5670-01	.6520-01	.9220	.3340-02	.2356-02	.4700	3.474	553.9
96	277.00	.90000	1468.0	.5390-01	.6630-01	.7620-01	.9220	.3899-02	.2758-02	.5530	4.092	551.6
96	277.00	.90700	1353.0	.6220-01	.7670-01	.8820-01	.9220	.4516-02	.3183-02	.6330	4.676	553.4
96	277.00	.92100	1469.0	.3460-01	.4240-01	.4850-01	.9220	.2485-02	.1771-02	.3620	2.682	547.9
96	277.00	.92800	1470.0	.4410-01	.5430-01	.6240-01	.9220	.3196-02	.2256-02	.4500	3.325	552.8

IH72. OTS W/PROTUBERANCES. RIGHT SRB HI/HREF

(RVZR15)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
96	277.00	.93700	1471.0	.5200-01	.6420-01	.7400-01	.9220	.3789-02	.2661-02	.5250	3.874	555.1
95	277.00	.93900	1354.0	.6140-01	.7660-01	.8890-01	.9220	.4550-02	.3142-02	.5970	4.390	563.4
96	335.00	.11000	1309.0	.1027	.1303	.1475	.9282	.7549-02	.5259-02	.9370	6.851	574.1
95	337.50	.74000	1355.0	.1155	.1463	.1718	.9220	.8797-02	.5915-02	1.061	7.761	574.0
95	337.50	.75000	1356.0	.1582	.2016	.2381	.9220	.1219-01	.8101-02	1.420	10.54	578.2
96	337.50	.76500	1357.0	.4700-01	.5740-01	.6540-01	.9220	.3348-02	.2408-02	.5030	3.803	543.2
96	337.50	.92500	1359.0	.4440-01	.5510-01	.6360-01	.9220	.3257-02	.2272-02	.4410	3.248	558.3
96	337.50	.93200	1360.0	.5490-01	.6830-01	.7910-01	.9220	.4049-02	.2809-02	.5380	3.964	560.6
96	337.50	.93900	1361.0	.6130-01	.7620-01	.8810-01	.9220	.4512-02	.3139-02	.6050	4.459	559.4

RIGHT SRB

PARAMETRIC DATA

ALPHA = .0000 BETA = -5.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
83	-.1000-01	-5.100	4.020	72.80	748.0	176.7	.4670	5.280	2618.	.2217-03	.1422-06	4.080
84	-.1000-01	-5.100	4.020	72.70	747.0	176.4	.4660	5.274	2616.	.2217-03	.1420-06	4.084

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
83	.5116-01	.1138-01
84	.5112-01	.1138-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
83	.00000	.25000-01	1311.0	.1920	.2546	.2886	.9319	.1476-01	.9824-02	1.495	10.64	595.5
83	.00000	.76500	1362.0	.1056	.1333	.1561	.9220	.7988-02	.5404-02	.9740	7.271	567.4
83	.00000	.83700	1364.0	.5300-01	.6620-01	.7700-01	.9220	.3939-02	.2709-02	.5060	3.726	560.9
83	.00000	.88400	1365.0	.5590-01	.7050-01	.8240-01	.9220	.4217-02	.2862-02	.5190	3.813	566.2
83	.00000	.90700	1366.0	.4740-01	.5960-01	.6960-01	.9220	.3560-02	.2425-02	.4440	3.262	564.6
83	5.0000	.75000-01	1313.0	.1050	.1347	.1496	.9324	.7654-02	.5374-02	.9120	6.441	578.0
83	15.600	.95300	1431.0	.5450-01	.6880-01	.7500-01	.9342	.3835-02	.2790-02	.5040	3.702	566.9
83	20.000	.75000-01	1316.0	.1124	.1453	.1605	.9338	.8211-02	.5752-02	.9500	6.697	582.5
83	20.000	.10000+00	1318.0	.1125	.1469	.1631	.9338	.8342-02	.5756-02	.9190	6.672	588.1
83	20.000	.11000	1319.0	.1186	.1544	.1712	.9338	.8757-02	.6066-02	.9760	7.098	586.7
83	20.000	.95300	1432.0	.4870-01	.6110-01	.6630-01	.9346	.3394-02	.2490-02	.4570	3.361	564.1
84	22.500	.72400	1367.0	.1011	.1304	.1555	.9221	.7951-02	.5171-02	.8600	6.376	580.4
83	22.500	.74000	1368.0	.1134	.1472	.1764	.9221	.9027-02	.5802-02	.9460	6.881	584.7
83	22.500	.75000	1369.0	.1942	.2611	.3233	.9221	.1654-01	.9935-02	1.449	10.45	601.8
84	22.500	.76500	1370.0	.1028	.1294	.1513	.9221	.7736-02	.5253-02	.9520	7.110	565.5
84	22.500	.77100	1371.0	.6720-01	.8340-01	.9640-01	.9221	.4931-02	.3433-02	.6570	4.853	555.2
83	22.500	.92500	1372.0	.3130-01	.3920-01	.4550-01	.9221	.2328-02	.1603-02	.3000	2.206	560.8
83	22.500	.93900	1374.0	.4180-01	.5230-01	.6090-01	.9221	.3116-02	.2138-02	.3970	2.918	562.2
83	24.400	.95300	1433.0	.5890-01	.7430-01	.8060-01	.9350	.4122-02	.3014-02	.5450	3.998	566.9
83	35.000	.75000-01	1321.0	.1130	.1467	.1609	.9352	.8234-02	.5779-02	.9390	6.609	585.2

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR16)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
83	35.000	.11000	1322.0	.9900-01	.1285	.1409	.9352	.7209-02	.5067-02	.8260	6.112	584.6
83	35.600	.95300	1434.0	.4140-01	.5240-01	.5650-01	.9361	.2893-02	.2119-02	.3790	2.776	569.0
83	40.000	.95300	1435.0	.3980-01	.5050-01	.5440-01	.9365	.2784-02	.2037-02	.3610	2.643	570.6
83	45.000	.74000	1375.0	.9490-01	.1228	.1466	.9224	.7498-02	.4853-02	.7980	5.908	583.3
83	45.000	.75000	1376.0	.8380-01	.1100	.1329	.9224	.6797-02	.4289-02	.6740	4.973	590.5
84	45.000	.76500	1377.0	.1223	.1574	.1870	.9224	.9559-02	.6253-02	1.047	7.640	579.2
84	45.000	.77100	1378.0	.1065	.1391	.1672	.9224	.8549-02	.5446-02	.8690	6.317	587.1
84	45.000	.81500	1379.0	.4790-01	.6010-01	.6990-01	.9224	.3575-02	.2449-02	.4500	3.311	562.9
84	45.000	.88400	1381.0	.1600-01	.2010-01	.2330-01	.9224	.1193-02	.8177-03	.1500	1.107	562.7
84	45.000	.90700	1382.0	.2960-01	.3720-01	.4320-01	.9224	.2206-02	.1522-02	.2840	2.091	560.1
83	65.000	.11000	1323.0	.1624	.2094	.2260	.9373	.1156-01	.8306-02	1.382	9.905	581.3
83	67.500	.74000	1383.0	.1187	.1558	.1877	.9227	.9603-02	.6074-02	.9550	7.046	590.4
83	67.500	.75000	1384.0	.1339	.1812	.2244	.9227	.1148-01	.6849-02	.9810	7.190	604.4
84	67.500	.77100	1385.0	.1030	.1313	.1544	.9227	.7894-02	.5266-02	.9130	6.679	573.4
83	76.000	.10000+00	1324.0	.1750	.2272	.2451	.9377	.1254-01	.8952-02	1.457	10.60	584.9
83	76.000	.14100	1386.0	.1252	.1639	.1970	.9228	.1008-01	.6405-02	1.014	7.360	589.4
83	76.000	.14800	1387.0	.8250-01	.1038	.1206	.9228	.6171-02	.4222-02	.7720	5.671	564.9
83	76.000	.15500	1388.0	.5850-01	.7250-01	.8330-01	.9228	.4259-02	.2993-02	.5810	4.296	553.5
83	76.000	.16200	1389.0	.4740-01	.5850-01	.6710-01	.9228	.3434-02	.2425-02	.4770	3.527	551.1
83	77.500	.95300	1436.0	.5570-01	.7220-01	.7700-01	.9387	.3938-02	.2901-02	.5060	3.699	573.4
83	77.500	.99400	1439.0	.5940-01	.7750-01	.8330-01	.9387	.4263-02	.3038-02	.4850	3.522	588.1
84	90.000	.15000-01	1325.0	.2684	.3589	.3908	.9379	.1998-01	.1372-01	2.030	14.92	598.7
83	90.000	.25000-01	1326.0	.2654	.3659	.4027	.9379	.2060-01	.1358-01	1.847	13.04	611.6
84	90.000	.40000-01	1327.0	.2266	.2990	.3241	.9379	.1657-01	.1158-01	1.785	12.93	592.6
83	90.000	.60000-01	1328.0	.1610	.2086	.2246	.9379	.1149-01	.8237-02	1.350	9.211	583.8
83	90.000	.75000-01	1329.0	.6710-01	.8540-01	.9140-01	.9379	.4676-02	.3435-02	.6010	4.058	572.8
84	90.000	.13230	1479.0	.3003	.5954	1.277	.9229	.6528-01	.1535-01	1.156	8.067	671.4
84	90.000	.13390	1480.0	.2808	.5547	1.179	.9229	.6027-01	.1436-01	1.086	7.575	671.1
84	90.000	.13560	1481.0	.2613	.4210	.6299	.9229	.3220-01	.1336-01	1.315	9.278	648.2
84	90.000	.13730	1482.0	.2140	.2961	.3741	.9229	.1913-01	.1094-01	1.472	10.57	612.1
84	90.000	.13890	1483.0	.1470	.1886	.2229	.9229	.1139-01	.7514-02	1.271	9.283	577.5
84	90.000	.55000	1391.0	.5280-01	.6560-01	.7540-01	.9229	.3857-02	.2700-02	.5180	3.828	554.7
84	90.000	.65000	1392.0	.4340-01	.5410-01	.6240-01	.9229	.3192-02	.2216-02	.4180	3.080	558.2
83	90.000	.74000	1393.0	.2690-01	.3330-01	.3820-01	.9229	.1956-02	.1375-02	.2670	2.005	553.6
83	90.000	.76500	1394.0	.1182	.1504	.1765	.9229	.9032-02	.6049-02	1.056	7.732	573.0
83	90.000	.77100	1395.0	.6140-01	.7720-01	.8970-01	.9229	.4591-02	.3143-02	.5750	4.226	564.7
83	90.000	.81500	1396.0	.2050-01	.2580-01	.3000-01	.9229	.1537-02	.1049-02	.1910	1.424	565.9
83	90.000	.83700	1397.0	.1720-01	.2170-01	.2520-01	.9229	.1289-02	.8823-03	.1610	1.186	564.7
83	90.000	.88400	1398.0	.2910-01	.3640-01	.4210-01	.9229	.2153-02	.1489-02	.2780	2.049	560.7
83	90.000	.89400	1399.0	.3130-01	.3900-01	.4500-01	.9229	.2301-02	.1602-02	.3040	2.241	557.9
83	90.000	.90700	1400.0	.2820-01	.3530-01	.4090-01	.9229	.2093-02	.1442-02	.2670	1.967	562.3
83	90.000	.91700	1401.0	.2850-01	.3560-01	.4120-01	.9229	.2109-02	.1456-02	.2710	1.998	561.3
83	90.000	.93200	1402.0	.4030-01	.5080-01	.5930-01	.9229	.3033-02	.2061-02	.3710	2.723	567.7

IH72, OTS W/PROTUBERANCES, RIGHT SR8 H1/HREF (RVZR16)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
83	90.000	.93900	1403.0	.4970-01	.6280-01	.7340-01	.9229	.3755-02	.2542-02	.4540	3.327	569.2
84	95.000	.13560	1484.0	.2085	.3371	.5069	.9228	.2592-01	.1066-01	1.043	7.354	648.8
84	95.000	.13730	1485.0	.2256	.3256	.4287	.9228	.2192-01	.1154-01	1.403	10.01	625.1
84	95.000	.13890	1486.0	.1984	.2697	.3350	.9228	.1713-01	.1014-01	1.434	10.33	605.4
84	95.000	.14560	1487.0	.1243	.1582	.1856	.9228	.9491-02	.6353-02	1.107	8.106	572.4
84	95.000	.14730	1488.0	.8190-01	.1018	.1173	.9228	.5997-02	.4189-02	.8010	5.910	555.6
83	104.00	.10000+00	1330.0	.1581	.2051	.2212	.9377	.1132-01	.8090-02	1.321	9.616	584.3
83	104.00	.12000	1404.0	.2193	.3243	.4384	.9228	.2243-01	.1122-01	1.296	9.215	632.2
83	104.00	.12760	1405.0	.2300	.3403	.4605	.9228	.2356-01	.1177-01	1.357	9.644	632.4
83	104.00	.13400	1406.0	.2018	.3049	.4220	.9228	.2159-01	.1033-01	1.142	8.102	637.0
83	104.00	.14100	1407.0	.2075	.2942	.3805	.9228	.1947-01	.1062-01	1.348	9.636	620.7
83	104.00	.14800	1408.0	.6660-01	.8350-01	.9690-01	.9228	.4959-02	.3407-02	.6290	4.623	563.2
83	104.00	.15500	1409.0	.8800-01	.1100	.1272	.9228	.6510-02	.4502-02	.8430	6.206	560.5
83	104.00	.16200	1410.0	.8710-01	.1094	.1272	.9228	.6507-02	.4454-02	.8150	5.990	564.7
83	104.00	.17300	1411.0	.6900-01	.8600-01	.9930-01	.9228	.5080-02	.3528-02	.6670	4.914	558.7
83	104.00	.18000	1412.0	.5310-01	.6580-01	.7560-01	.9228	.3865-02	.2716-02	.5270	3.896	553.6
83	104.00	.18600	1413.0	.4310-01	.5320-01	.6090-01	.9228	.3117-02	.2204-02	.4350	3.217	550.5
83	104.00	.19300	1414.0	.3640-01	.4490-01	.5140-01	.9228	.2630-02	.1863-02	.3680	2.728	549.9
83	104.00	.20000	1415.0	.3390-01	.4190-01	.4800-01	.9228	.2457-02	.1734-02	.3400	2.519	551.4
83	104.00	.25000	1416.0	.2820-01	.3490-01	.4000-01	.9228	.2045-02	.1445-02	.2840	2.139	550.9
84	112.00	.13560	1489.0	.1120	.1429	.1681	.9227	.8595-02	.5726-02	.9900	7.242	573.8
84	112.00	.13730	1490.0	.1161	.1500	.1785	.9227	.9126-02	.5934-02	.9790	7.135	581.7
84	112.00	.13890	1491.0	.1159	.1507	.1802	.9227	.9213-02	.5925-02	.9580	6.968	585.0
84	112.00	.14560	1492.0	.1112	.1412	.1655	.9227	.8461-02	.5685-02	1.000	7.325	570.8
84	112.00	.14730	1493.0	.1064	.1361	.1605	.9227	.8207-02	.5441-02	.9320	6.810	575.5
83	112.50	.74000	1417.0	.9270-01	.1208	.1447	.9227	.7401-02	.4743-02	.7630	5.545	586.8
83	112.50	.75000	1418.0	.1209	.1600	.1943	.9227	.9942-02	.6183-02	.9450	6.839	594.9
84	112.50	.77100	1419.0	.8380-01	.1062	.1243	.9227	.6353-02	.4283-02	.7580	5.654	569.6
83	112.50	.92500	1420.0	.3170-01	.3970-01	.4600-01	.9227	.2352-02	.1620-02	.3010	2.214	562.0
83	112.50	.93200	1421.0	.4130-01	.5200-01	.6070-01	.9227	.3105-02	.2111-02	.3810	2.799	567.1
83	112.50	.93900	1422.0	.4720-01	.5960-01	.6960-01	.9227	.3561-02	.2416-02	.4340	3.184	568.0
83	112.50	.95300	1440.0	.6540-01	.8300-01	.8860-01	.9383	.4533-02	.3345-02	.5890	4.314	571.6
84	112.50	.96700	1441.0	.8350-01	.1072	.1148	.9383	.5870-02	.4269-02	.7220	5.269	577.6
84	112.50	.99400	1443.0	.4250-01	.5480-01	.5880-01	.9383	.3007-02	.2171-02	.3600	2.624	580.8
84	135.00	.80000-02	1331.0	.2999	.4158	.4662	.9360	.2384-01	.1533-01	2.053	15.51	612.8
83	135.00	.25000-01	1332.0	.2445	.3335	.3712	.9360	.1899-01	.1251-01	1.752	12.61	607.6
84	135.00	.50000-01	1333.0	.1855	.2424	.2652	.9360	.1356-01	.9483-02	1.508	10.96	587.6
83	135.00	.75000-01	1334.0	.8660-01	.1106	.1199	.9360	.6135-02	.4432-02	.7640	5.676	575.4
83	135.00	.10000+00	1335.0	.8690-01	.1117	.1214	.9360	.6209-02	.4445-02	.7490	5.462	579.2
83	135.00	.40000	1423.0	.5850-01	.7370-01	.8590-01	.9224	.4396-02	.2993-02	.5440	4.063	565.9
84	135.00	.92500	1424.0	.2550-01	.3230-01	.3780-01	.9224	.1935-02	.1303-02	.2310	1.696	569.2
84	140.00	.13560	1494.0	.5680-01	.7140-01	.8320-01	.9224	.4253-02	.2904-02	.5300	3.900	564.0
84	140.00	.13730	1495.0	.4820-01	.6050-01	.7040-01	.9224	.3599-02	.2463-02	.4530	3.329	563.0

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
84	140.00	.13890	1496.0	.4950-01	.6190-01	.7190-01	.9224	.3676-02	.2531-02	.4710	3.472	560.4
84	140.00	.14560	1497.0	.4820-01	.5990-01	.6920-01	.9224	.3539-02	.2465-02	.4710	3.476	555.7
84	150.00	.14230	1499.0	.4220-01	.5240-01	.6060-01	.9222	.3101-02	.2156-02	.4110	3.036	556.0
84	180.00	.80000-02	1298.0	.2896	.3994	.4630	.9319	.2367-01	.1480-01	2.009	15.19	610.9
83	180.00	.15000-01	1299.0	.2149	.2778	.3108	.9319	.1589-01	.1098-01	1.810	12.97	581.9
84	180.00	.25000-01	1300.0	.2523	.3322	.3753	.9319	.1920-01	.1291-01	2.007	13.86	592.2
83	180.00	.50000-01	1301.0	.1569	.2011	.2239	.9319	.1144-01	.8022-02	1.364	9.489	576.7
84	180.00	.75000-01	1302.0	.1034	.1318	.1464	.9319	.7489-02	.5290-02	.9170	6.287	574.3
83	180.00	.10000+00	1303.0	.1258	.1630	.1825	.9319	.9328-02	.6431-02	1.053	7.668	582.9
83	225.00	.98000	1425.0	.1295	.1683	.1924	.9291	.9841-02	.6625-02	1.075	7.817	585.4
83	225.00	.99400	1426.0	.1237	.1604	.1831	.9291	.9370-02	.6329-02	1.034	7.526	584.3
83	263.00	.13600	1336.0	.3100-01	.3810-01	.4370-01	.9220	.2234-02	.1588-02	.3200	2.376	546.0
84	263.00	.20000	1472.0	.2230-01	.2710-01	.3090-01	.9220	.1579-02	.1140-02	.2390	1.777	537.4
84	263.00	.30000	1337.0	.3340-01	.4080-01	.4660-01	.9220	.2380-02	.1709-02	.3530	2.674	539.9
84	263.00	.40000	1473.0	.2590-01	.3200-01	.3690-01	.9220	.1887-02	.1324-02	.2580	1.911	551.6
84	263.00	.50000	1474.0	.2820-01	.3480-01	.4010-01	.9220	.2050-02	.1442-02	.2830	2.098	550.2
84	263.00	.60000	1475.0	.3090-01	.3790-01	.4350-01	.9220	.2224-02	.1579-02	.3170	2.352	545.9
84	263.00	.75000	1338.0	.5680-01	.7110-01	.8290-01	.9220	.4239-02	.2901-02	.5350	3.940	562.1
84	263.00	.81500	1339.0	.3790-01	.4670-01	.5360-01	.9220	.2741-02	.1936-02	.3840	2.842	548.5
84	263.00	.83700	1340.0	.3500-01	.4300-01	.4940-01	.9220	.2527-02	.1787-02	.3560	2.635	547.8
84	263.00	.88400	1341.0	.5650-01	.7060-01	.8210-01	.9220	.4198-02	.2890-02	.5400	3.980	559.7
84	263.00	.89400	1342.0	.5740-01	.7080-01	.8140-01	.9220	.4162-02	.2936-02	.5810	4.302	548.9
84	263.00	.92800	1477.0	.5480-01	.6810-01	.7880-01	.9220	.4027-02	.2803-02	.5370	3.968	555.0
83	263.00	.93900	1344.0	.7720-01	.9690-01	.1130	.9220	.5783-02	.3949-02	.7260	5.338	563.8
84	270.00	.80000-02	1304.0	.1859	.2368	.2705	.9273	.1383-01	.9504-02	1.650	12.94	573.0
84	270.00	.50000-01	1306.0	.6670-01	.9020-01	.1075	.9273	.5494-02	.3408-02	.4870	3.346	603.7
83	270.00	.75000-01	1307.0	.8260-01	.1038	.1175	.9273	.6013-02	.4225-02	.7720	5.406	564.8
84	270.00	.10000+00	1308.0	.9270-01	.1172	.1331	.9273	.6805-02	.4741-02	.8480	6.225	567.7
83	270.00	.11500	1345.0	.7570-01	.9590-01	.1127	.9220	.5767-02	.3874-02	.6880	5.043	570.0
83	277.00	.13600	1346.0	.2880-01	.3530-01	.4050-01	.9220	.2072-02	.1472-02	.2960	2.197	546.4
83	277.00	.30000	1347.0	.3260-01	.3970-01	.4530-01	.9220	.2316-02	.1667-02	.3470	2.629	539.4
84	277.00	.40000	1464.0	.2660-01	.3280-01	.3770-01	.9220	.1927-02	.1357-02	.2670	1.980	549.7
84	277.00	.60000	1466.0	.3030-01	.3730-01	.4270-01	.9220	.2184-02	.1551-02	.3110	2.309	546.0
84	277.00	.70000	1467.0	.2800-01	.3470-01	.4000-01	.9220	.2047-02	.1431-02	.2770	2.046	553.2
83	277.00	.75000	1348.0	.3830-01	.4790-01	.5580-01	.9220	.2854-02	.1961-02	.3650	2.689	561.4
83	277.00	.81500	1349.0	.4260-01	.5270-01	.6070-01	.9220	.3106-02	.2182-02	.4270	3.161	551.8
83	277.00	.83700	1350.0	.4070-01	.5020-01	.5780-01	.9220	.2957-02	.2081-02	.4090	3.030	550.9
83	277.00	.88400	1351.0	.5140-01	.6380-01	.7390-01	.9220	.3779-02	.2627-02	.5030	3.712	556.2
83	277.00	.89400	1352.0	.5410-01	.6700-01	.7720-01	.9220	.3950-02	.2768-02	.5390	3.989	552.8
84	277.00	.90000	1468.0	.6410-01	.7960-01	.9200-01	.9220	.4706-02	.3277-02	.6290	4.642	554.9
84	277.00	.90700	1353.0	.6340-01	.7890-01	.9140-01	.9220	.4672-02	.3243-02	.6180	4.559	556.2
84	277.00	.92100	1469.0	.5400-01	.6670-01	.7680-01	.9220	.3928-02	.2758-02	.5390	3.991	551.1
84	277.00	.93700	1471.0	.5620-01	.7010-01	.8130-01	.9220	.4156-02	.2873-02	.5420	3.995	558.1

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR16)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
83	277.00	.93900	1354.0	.7510-01	.9460-01	.1107	.9220	.5661-02	.3841-02	.6970	5.117	566.3
84	335.00	.11000	1309.0	.1246	.1600	.1807	.9298	.9237-02	.6369-02	1.075	7.851	577.9
83	337.50	.74000	1355.0	.9740-01	.1247	.1478	.9220	.7562-02	.4984-02	.8520	6.227	576.6
83	337.50	.75000	1356.0	.6520-01	.8390-01	.9990-01	.9220	.5111-02	.3335-02	.5600	4.152	579.8
84	337.50	.76500	1357.0	.5550-01	.6840-01	.7860-01	.9220	.4016-02	.2840-02	.5650	4.256	547.8
84	337.50	.92500	1359.0	.4270-01	.5350-01	.6230-01	.9220	.3185-02	.2182-02	.4040	2.972	561.6
84	337.50	.93200	1360.0	.5270-01	.6630-01	.7750-01	.9220	.3964-02	.2694-02	.4900	3.601	564.8
84	337.50	.93900	1361.0	.5970-01	.7500-01	.8760-01	.9220	.4479-02	.3053-02	.5580	4.104	563.8

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
79	.8000-01	.0000	4.020	72.50	752.0	177.6	.4650	5.261	2625.	.2197-03	.1430-06	4.033
80	.2000-01	.0000	4.020	72.70	751.0	177.5	.4660	5.277	2624.	.2205-03	.1429-06	4.048

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
79	.5111-01	.1144-01
80	.5118-01	.1142-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
79	.00000	.25000-01	1311.0	.2943	.3703	.4085	.9319	.2088-01	.1504-01	2.753	19.86	568.6
79	.00000	.76500	1362.0	.9590-01	.1208	.1413	.9220	.7223-02	.4901-02	.8940	6.663	569.4
79	.00000	.83700	1364.0	.6970-01	.8680-01	.1006	.9220	.5143-02	.3561-02	.6790	4.999	561.0
79	.00000	.88400	1365.0	.1577	.2013	.2383	.9220	.1218-01	.8057-02	1.396	10.19	578.5
79	.00000	.90700	1366.0	.1135	.1453	.1723	.9220	.8806-02	.5801-02	.9970	7.270	579.9
79	5.0000	.75000-01	1313.0	.1678	.2087	.2289	.9319	.1170-01	.8575-02	1.643	11.71	560.1
79	15.600	.95300	1431.0	.1082	.1399	.1558	.9326	.7960-02	.5528-02	.9160	6.664	585.9
79	20.000	.75000-01	1316.0	.1566	.1953	.2145	.9319	.1096-01	.8005-02	1.520	10.82	561.9
79	20.000	.10000+00	1318.0	.1673	.2085	.2289	.9319	.1170-01	.8549-02	1.626	11.97	561.5
79	20.000	.11000	1319.0	.1622	.2014	.2207	.9319	.1128-01	.8292-02	1.601	11.80	558.6
80	22.500	.95300	1432.0	.1157	.1495	.1664	.9326	.8506-02	.5914-02	.9830	7.150	585.5
79	22.500	.72400	1367.0	.6770-01	.8540-01	.1000+00	.9220	.5116-02	.3465-02	.6290	4.693	569.6
79	22.500	.74000	1368.0	.1831	.2359	.2814	.9220	.1438-01	.9360-02	1.572	11.45	583.7
79	22.500	.75000	1369.0	.2396	.3180	.3895	.9220	.1990-01	.1224-01	1.865	13.48	599.4
80	22.500	.76500	1370.0	.9980-01	.1250	.1456	.9220	.7451-02	.5107-02	.9510	7.108	565.0
80	22.500	.77100	1371.0	.6410-01	.7950-01	.9180-01	.9220	.4697-02	.3282-02	.6380	4.707	556.9
79	22.500	.92500	1372.0	.3910-01	.4880-01	.5660-01	.9220	.2891-02	.2001-02	.3810	2.802	561.4
79	22.500	.93900	1374.0	.7090-01	.8960-01	.1050	.9220	.5366-02	.3625-02	.6550	4.800	571.0
79	24.400	.95300	1433.0	.8450-01	.1086	.1206	.9326	.6164-02	.4319-02	.7310	5.325	582.5
79	35.000	.75000-01	1321.0	.2075	.2588	.2842	.9319	.1453-01	.1060-01	2.010	14.31	562.2

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR17)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
79	35.000	.11000	1322.0	.1488	.1842	.2016	.9319	.1030-01	.7607-02	1.488	11.17	556.1
79	35.600	.95300	1434.0	.6070-01	.7700-01	.8500-01	.9326	.4342-02	.3103-02	.5510	4.028	574.2
79	40.000	.95300	1435.0	.4680-01	.5910-01	.6510-01	.9326	.3326-02	.2393-02	.4320	3.165	571.2
79	45.000	.74000	1375.0	.1670	.2160	.2583	.9220	.1320-01	.8536-02	1.416	10.47	585.8
79	45.000	.75000	1376.0	.2033	.2669	.3237	.9220	.1654-01	.1039-01	1.637	12.06	594.1
80	45.000	.76500	1377.0	.1969	.2520	.2989	.9220	.1530-01	.1008-01	1.730	12.62	579.6
80	45.000	.77100	1378.0	.2112	.2755	.3321	.9220	.1700-01	.1081-01	1.739	12.62	590.3
80	45.000	.81500	1379.0	.4330-01	.5440-01	.6300-01	.9220	.3226-02	.2240-02	.4300	3.165	559.5
80	45.000	.88400	1381.0	.4560-01	.5680-01	.6590-01	.9220	.3370-02	.2336+02	.4460	3.286	560.3
80	45.000	.90700	1382.0	.5020-01	.6210-01	.7160-01	.9220	.3665-02	.2569-02	.5040	3.720	555.2
79	65.000	.11000	1323.0	.1899	.2398	.2650	.9320	.1354-01	.9703-02	1.750	12.61	571.3
79	67.500	.74000	1383.0	.1766	.2272	.2706	.9220	.1383-01	.9026-02	1.523	11.28	582.9
79	67.500	.75000	1384.0	.2238	.2909	.3494	.9220	.1786-01	.1144-01	1.866	13.78	588.6
80	67.500	.77100	1385.0	.1417	.1765	.2047	.9220	.1048-01	.7251-02	1.380	10.16	560.9
79	76.000	.10000+00	1324.0	.1291	.1629	.1798	.9320	.9191-02	.6599-02	1.196	8.768	570.4
79	76.000	.14100	1386.0	.1958	.2506	.2973	.9220	.1519-01	.1001-01	1.719	12.54	579.9
79	76.000	.14800	1387.0	.1089	.1342	.1543	.9220	.7887-02	.5564-02	1.108	8.190	552.6
79	76.000	.15500	1388.0	.6240-01	.7620-01	.8690-01	.9220	.4443-02	.3189-02	.6620	4.919	544.0
79	76.000	.16200	1389.0	.4820-01	.5870-01	.6680-01	.9220	.3415-02	.2464-02	.5190	3.856	541.2
79	76.000	.25000	1390.0	.1190-01	.1430-01	.1600-01	.9220	.8199-03	.6090-03	.1390	1.059	523.7
79	77.500	.95300	1436.0	.4160-01	.5180-01	.5660-01	.9327	.2891-02	.2127-02	.4070	2.999	560.3
79	77.500	.99400	1439.0	.3730-01	.4680-01	.5140-01	.9327	.2626-02	.1906-02	.3520	2.582	567.1
80	90.000	.15000-01	1325.0	.2974	.3770	.4173	.9320	.2135-01	.1522-01	2.706	20.14	573.5
79	90.000	.25000-01	1326.0	.3609	.4687	.5251	.9320	.2684-01	.1845-01	3.016	21.55	588.2
80	90.000	.40000-01	1327.0	.2652	.3339	.3682	.9320	.1884-01	.1357-01	2.479	18.18	568.6
79	90.000	.50000-01	1328.0	.1897	.2374	.2610	.9320	.1334-01	.9697-02	1.815	12.51	564.5
79	90.000	.75000-01	1329.0	.1038	.1291	.1415	.9320	.7231-02	.5303-02	1.017	6.915	559.9
80	90.000	.13230	1479.0	.4772	.9135	1.872	.9220	.9579-01	.2442-01	1.921	13.39	672.6
80	90.000	.13390	1480.0	.4399	.8264	1.627	.9220	.8326-01	.2251-01	1.808	12.62	671.0
80	90.000	.13560	1481.0	.2847	.4588	.6977	.9220	.3570-01	.1457-01	1.443	10.16	652.3
80	90.000	.13730	1482.0	.1496	.2091	.2691	.9220	.1377-01	.7654-02	1.010	7.224	619.3
80	90.000	.13890	1483.0	.8540-01	.1103	.1319	.9220	.6749-02	.4370-02	.7270	5.286	585.0
80	90.000	.55000	1391.0	.5430-01	.6720-01	.7750-01	.9220	.3966-02	.2778-02	.5440	4.013	555.6
80	90.000	.65000	1392.0	.4630-01	.5750-01	.6660-01	.9220	.3410-02	.2369-02	.4540	3.349	559.4
79	90.000	.74000	1393.0	.2310-01	.2850-01	.3290-01	.9220	.1680-02	.1181-02	.2330	1.748	554.6
79	90.000	.76500	1394.0	.1746	.2196	.2566	.9220	.1312-01	.8926-02	1.638	12.02	568.2
79	90.000	.77100	1395.0	.4980-01	.6250-01	.7290-01	.9220	.3728-02	.2547-02	.4720	3.463	566.6
79	90.000	.81500	1396 0	.2030-01	.2500-01	.2880-01	.9220	.1473-02	.1037-02	.2050	1.541	553.9
79	90.000	.83700	1397.0	.1180-01	.1470-01	.1710-01	.9220	.8720-03	.6037-03	.1150	.8470	561.1
79	90.000	.88400	1398.0	.1860-01	.2310-01	.2680-01	.9220	.1370-02	.9490-03	.1810	1.334	560.8
79	90.000	.89400	1399.0	.5210-01	.6420-01	.7380-01	.9220	.3773-02	.2664-02	.5310	3.929	552.2
79	90.000	.90700	1400.0	.2870-01	.3540-01	.4090-01	.9220	.2088-02	.1465-02	.2880	2.125	555.2
79	90.000	.91700	1401.0	.4090-01	.5040-01	.5800-01	.9220	.2963-02	.2091-02	.4160	3.079	552.6

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR17)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
79	90.000	.93200	1402.0	.3730-01	.4620-01	.5330-01	.9220	.2725-02	.1904-02	.3710	2.735	557.0
79	90.000	.93900	1403.0	.3160-01	.3920-01	.4530-01	.9220	.2315-02	.1614-02	.3120	2.303	558.2
80	95.000	.13560	1484.0	.3745	.5688	.8018	.9220	.4104-01	.1916-01	2.107	14.91	641.3
80	95.000	.13730	1485.0	.2501	.3541	.4615	.9220	.2362-01	.1280-01	1.637	11.69	623.4
80	95.000	.13890	1486.0	.1476	.2020	.2546	.9220	.1303-01	.7555-02	1.054	7.565	611.8
80	95.000	.14560	1487.0	.1309	.1661	.1955	.9220	.1000-01	.6698-02	1.188	8.690	573.9
80	95.000	.14730	1488.0	.1000+00	.1239	.1430	.9220	.7318-02	.5119-02	.9980	7.367	556.3
79	104.00	.10000+00	1330.0	.1505	.1915	.2124	.9320	.1086-01	.7691-02	1.348	9.852	576.4
79	104.00	.12000	1404.0	.3626	.5139	.6707	.9220	.3428-01	.1853-01	2.365	16.88	624.1
79	104.00	.12700	1405.0	.3573	.4995	.6428	.9220	.3285-01	.1826-01	2.410	17.24	619.7
79	104.00	.13400	1406.0	.3129	.4501	.5966	.9220	.3049-01	.1599-01	1.972	14.04	628.4
79	104.00	.14100	1407.0	.2075	.2880	.3680	.9220	.1881-01	.1061-01	1.426	10.21	617.3
79	104.00	.14800	1408.0	.7490-01	.9340-01	.1083	.9220	.5535-02	.3829-02	.7280	5.362	561.5
79	104.00	.15500	1409.0	.7590-01	.9520-01	.1110	.9220	.5672-02	.3878-02	.7190	5.277	566.4
79	104.00	.16200	1410.0	.6660-01	.1087	.1268	.9220	.6478-02	.4426-02	.8190	6.013	566.7
79	104.00	.17300	1411.0	.7110-01	.8770-01	.1009	.9220	.5159-02	.3633-02	.7200	5.321	553.5
79	104.00	.18000	1412.0	.5690-01	.6970-01	.7970-01	.9220	.4075-02	.2907-02	.5950	4.409	547.2
79	104.00	.18600	1413.0	.4430-01	.5410-01	.6180-01	.9220	.3158-02	.2267-02	.4710	3.497	544.0
79	104.00	.19300	1414.0	.3980-01	.4850-01	.5530-01	.9220	.2826-02	.2034-02	.4260	3.164	542.5
79	104.00	.20000	1415.0	.4050-01	.4940-01	.5640-01	.9220	.2883-02	.2070-02	.4310	3.200	543.6
79	104.00	.25000	1416.0	.2670-01	.3250-01	.3700-01	.9220	.1893-02	.1365-02	.2870	2.170	541.5
80	112.00	.13560	1489.0	.1136	.1434	.1680	.9220	.8599-02	.5816-02	1.053	7.717	570.2
80	112.00	.13730	1490.0	.1388	.1769	.2090	.9220	.1070-01	.7102-02	1.238	9.046	576.9
80	112.00	.13890	1491.0	.1733	.2223	.2641	.9220	.1352-01	.8867-02	1.511	11.01	580.9
80	112.00	.14560	1492.0	.1470	.1843	.2148	.9220	.1099-01	.7525-02	1.398	10.27	565.5
80	112.00	.14730	1493.0	.1181	.1504	.1776	.9220	.9088-02	.6046-02	1.058	7.733	576.2
79	112.50	.74000	1417.0	.7270-01	.9780-01	.1213	.9220	.6201-02	.3713-02	.5430	3.908	605.6
79	112.50	.75000	1418.0	.8400-01	.1195	.1564	.9220	.7995-02	.4295-02	.5440	3.881	625.0
79	112.50	.92500	1420.0	.4190-01	.5160-01	.5920-01	.9220	.3028-02	.2143-02	.4300	3.183	551.0
79	112.50	.93200	1421.0	.4140-01	.5130-01	.5920-01	.9220	.3023-02	.2115-02	.4130	3.047	556.5
79	112.50	.93900	1422.0	.3630-01	.4510-01	.5210-01	.9220	.2662-02	.1857-02	.3600	2.656	557.8
79	112.50	.95300	1440.0	.5210-01	.6490-01	.7090-01	.9327	.3621-02	.2661-02	.5070	3.736	561.0
80	112.50	.96700	1441.0	.5580-01	.6990-01	.7660-01	.9327	.3919-02	.2856-02	.5330	3.913	564.8
80	112.50	.99400	1443.0	.3450-01	.4370-01	.4810-01	.9327	.2459-02	.1767-02	.3170	2.322	571.8
80	135.00	.80000-02	1331.0	.3574	.4686	.5276	.9320	.2700-01	.1829-01	2.898	22.10	592.9
79	135.00	.25000-01	1332.0	.3034	.3983	.4486	.9320	.2293-01	.1551-01	2.448	17.73	593.9
80	135.00	.50000-01	1333.0	.2217	.2815	.3118	.9320	.1596-01	.1135-01	2.007	14.68	574.4
79	135.00	.75000-01	1334.0	.1042	.1313	.1447	.9320	.7397-02	.5327-02	.9720	7.250	569.2
79	135.00	.10000+00	1335.0	.1211	.1534	.1697	.9320	.8672-02	.6187-02	1.103	8.068	573.5
79	135.00	.40000	1423.0	.5280-01	.6610-01	.7700-01	.9220	.3934-02	.2698-02	.5030	3.762	565.1
80	135.00	.92500	1424.0	.2770-01	.3450-01	.3990-01	.9220	.2042-02	.1420-02	.2730	2.011	559.1
80	140.00	.13560	1494.0	.7030-01	.8710-01	.1004	.9220	.5140-02	.3599-02	.7040	5.196	555.7
80	140.00	.13730	1495.0	.5930-01	.7350-01	.8480-01	.9220	.4338-02	.3036-02	.5930	4.374	556.1

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR17)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
80	140.00	.13890	1496.0	.5150-01	.6370-01	.7350-01	.9220	.3762-02	.2634-02	.5150	3.799	555.9
80	140.00	.14560	1497.0	.5810-01	.7150-01	.8210-01	.9220	.4204-02	.2974-02	.5960	4.410	550.9
80	150.00	.14230	1499.0	.5190-01	.6380-01	.7330-01	.9220	.3750-02	.2655-02	.5320	3.941	550.7
80	180.00	.80000-02	1298.0	.3388	.4480	.5067	.9320	.2593-01	.1734-01	2.672	20.34	597.2
80	180.00	.15000-01	1299.0	.2101	.2683	.2980	.9320	.1525-01	.1075-01	1.861	13.37	578.2
79	180.00	.25000-01	1300.0	.3413	.4397	.4904	.9321	.2506-01	.1744-01	2.929	20.31	583.8
80	180.00	.50000-01	1301.0	.2198	.2778	.3070	.9320	.1571-01	.1125-01	2.022	14.10	571.5
79	180.00	.75000-01	1302.0	.1201	.1516	.1674	.9321	.8554-02	.6140-02	1.111	7.630	570.8
80	180.00	.10000+00	1303.0	.1696	.2156	.2389	.9320	.1223-01	.8682-02	1.530	11.18	575.1
79	225.00	.98000	1425.0	.5750-01	.7500-01	.8380-01	.9328	.4283-02	.2937-02	.4720	3.426	590.9
79	225.00	.99400	1426.0	.2040-01	.2660-01	.2980-01	.9328	.1521-02	.1043-02	.1680	1.215	591.0
79	263.00	.13600	1336.0	.4080-01	.4970-01	.5670-01	.9220	.2899-02	.2085-02	.4350	3.234	542.9
80	263.00	.20000	1472.0	.3550-01	.4270-01	.4830-01	.9220	.2473-02	.1814-02	.3990	2.985	531.2
80	263.00	.30000	1337.0	.4620-01	.5560-01	.6270-01	.9220	.3209-02	.2362-02	.5240	3.989	529.3
80	263.00	.40000	1473.0	.4030-01	.4910-01	.5580-01	.9220	.2857-02	.2065-02	.4360	3.245	540.1
80	263.00	.50000	1474.0	.3120-01	.3800-01	.4330-01	.9220	.2215-02	.1599-02	.3370	2.506	540.6
80	263.00	.60000	1475.0	.4400-01	.5340-01	.6080-01	.9220	.3110-02	.2250-02	.4770	3.550	539.3
80	263.00	.75000	1338.0	.3420-01	.4210-01	.4830-01	.9220	.2473-02	.1750-02	.3510	2.599	550.7
80	263.00	.81500	1339.0	.2330-01	.2830-01	.3210-01	.9220	.1644-02	.1192-02	.2540	1.895	537.9
80	263.00	.83700	1340.0	.2550-01	.3090-01	.3510-01	.9220	.1795-02	.1307-02	.2820	2.105	535.4
80	263.00	.88400	1341.0	.3530-01	.4310-01	.4920-01	.9220	.2517-02	.1809-02	.3760	2.796	543.2
80	263.00	.89400	1342.0	.6060-01	.7400-01	.8420-01	.9220	.4311-02	.3114-02	.6570	4.889	540.3
80	263.00	.92800	1477.0	.3490-01	.4290-01	.4930-01	.9220	.2521-02	.1788-02	.3600	2.666	549.8
79	263.00	.93900	1344.0	.6220-01	.7730-01	.8960-01	.9220	.4579-02	.3178-02	.6090	4.486	560.1
80	270.00	.80000-02	1304.0	.2205	.2742	.3006	.9320	.1538-01	.1129-01	2.165	17.09	559.5
79	270.00	.25000-01	1305.0	-.2540-01	-.2000-01	-.1860-01	.9320	-.9486-03	-.1297-02	.1810	1.141	891.0
80	270.00	.50000-01	1306.0	.2088	.2598	.2849	.9320	.1458-01	.1069-01	2.044	14.34	560.0
79	270.00	.75000-01	1307.0	.1334	.1659	.1818	.9320	.9292-02	.6820-02	1.311	9.197	559.5
80	270.00	.10000+00	1308.0	.1578	.1974	.2171	.9320	.1111-01	.8075-02	1.510	11.10	564.2
79	270.00	.11500	1345.0	.1088	.1370	.1601	.9220	.8184-02	.5562-02	1.018	7.465	568.7
79	277.00	.13600	1346.0	.3630-01	.4430-01	.5040-01	.9220	.2578-02	.1856-02	.3880	2.886	542.4
79	277.00	.30000	1347.0	.4030-01	.4850-01	.5470-01	.9220	.2794-02	.2059-02	.4590	3.490	528.9
80	277.00	.40000	1464.0	.3330-01	.4040-01	.4590-01	.9220	.2350-02	.1705-02	.3640	2.715	537.6
80	277.00	.60000	1466.0	.4450-01	.5380-01	.6100-01	.9220	.3121-02	.2278-02	.4940	3.687	534.4
80	277.00	.70000	1467.0	.4300-01	.5230-01	.5960-01	.9220	.3049-02	.2200-02	.4630	3.445	540.8
79	277.00	.75000	1348.0	.7610-01	.9380-01	.1080	.9220	.5517-02	.3888-02	.7720	5.704	553.2
79	277.00	.81500	1349.0	.4740-01	.5790-01	.6610-01	.9220	.3376-02	.2420-02	.5020	3.723	544.5
79	277.00	.83700	1350.0	.4160-01	.5070-01	.5780-01	.9220	.2956-02	.2124-02	.4430	3.289	543.3
79	277.00	.88400	1351.0	.5930-01	.7270-01	.8330-01	.9220	.4258-02	.3030-02	.6160	4.563	548.4
79	277.00	.89400	1352.0	.5910-01	.7230-01	.8260-01	.9220	.4219-02	.3021-02	.6240	4.631	545.2
80	277.00	.90000	1468.0	.5710-01	.7010-01	.8030-01	.9220	.4111-02	.2921-02	.5920	4.383	548.8
80	277.00	.90700	1353.0	.6640-01	.8180-01	.9390-01	.9220	.4806-02	.3400-02	.6810	5.041	550.9
80	277.00	.92100	1469.0	.6630-01	.8100-01	.9250-01	.9220	.4734-02	.3396-02	.7040	5.227	544.0

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
80	277.00	.92800	1470.0	.7490-01	.9240-01	.1062	.9220	.5434-02	.3835-02	.7640	5.650	552.1
80	277.00	.93700	1471.0	.8590-01	.1062	.1224	.9220	.6267-02	.4394-02	.8620	6.363	555.2
79	277.00	.93900	1354.0	.9840-01	.1226	.1421	.9220	.7262-02	.5031-02	.9600	7.071	560.8
80	335.00	.11000	1309.0	.1798	.2235	.2450	.9320	.1254-01	.9200-02	1.767	13.02	559.2
79	337.50	.74000	1355.0	.1326	.1688	.1993	.9220	.1019-01	.6777-02	1.187	8.671	576.6
79	337.50	.75000	1356.0	.1144	.1496	.1807	.9220	.9236-02	.5846-02	.9340	6.888	591.9
80	337.50	.76500	1357.0	.6090-01	.7480-01	.8580-01	.9220	.4393-02	.3116-02	.6280	4.728	549.8
80	337.50	.92500	1359.0	.7980-01	.1004	.1175	.9220	.6012-02	.4083-02	.7450	5.468	568.7
80	337.50	.93200	1360.0	.9820-01	.1246	.1467	.9220	.7510-02	.5024-02	.8890	6.503	574.3
80	337.50	.93900	1361.0	.1627	.2098	.2504	.9220	.1281-01	.8324-02	1.392	10.13	584.0

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR18)

RIGHT SRB

PARAMETRIC DATA

ALPHA = .0000 BETA = 5.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
81	.1000-01	5.100	4.020	72.70	751.0	177.3	.4660	5.277	2623.	.2207-03	.1428-06	4.054
82	.1000-01	5.100	4.020	72.70	750.0	177.2	.4660	5.274	2622.	.2207-03	.1427-06	4.057

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
81	.5117-01	.1142-01
82	.5116-01	.1141-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
81	.00000	.25000-01	1311.0	.3425	.4610	.5270	.9319	.2697-01	.1752-01	2.557	18.12	604.6
81	.00000	.76500	1362.0	.1106	.1452	.1761	.9220	.9011-02	.5658-02	.8900	6.559	593.2
81	.00000	.83700	1364.0	.6050-01	.7810-01	.9340-01	.9220	.4778-02	.3096-02	.5150	3.746	584.3
81	.00000	.88400	1365.0	.1138	.1533	.1904	.9220	.9741-02	.5823-02	.8480	6.106	605.0
81	.00000	.90700	1366.0	.1260	.1696	.2105	.9220	.1077-01	.6446-02	.9400	6.771	604.8
81	5.0000	.75000-01	1313.0	.1464	.1901	.2137	.9314	.1094-01	.7492-02	1.224	8.608	587.2
81	15.600	.95300	1431.0	.1672	.2287	.2653	.9312	.1358-01	.8557-02	1.195	8.585	610.9
81	20.000	.75000-01	1316.0	.1473	.1923	.2189	.9302	.1120-01	.7539-02	1.209	8.489	590.2
81	20.000	.10000+00	1318.0	.1685	.2184	.2476	.9302	.1267-01	.8623-02	1.415	10.29	586.4
81	20.000	.11000	1319.0	.1695	.2189	.2475	.9302	.1266-01	.8675-02	1.444	10.51	584.1
81	20.000	.95300	1432.0	.1566	.2149	.2507	.9308	.1283-01	.8014-02	1.109	7.959	612.2
82	22.500	.72400	1367.0	.8990-01	.1202	.1481	.9220	.7576-02	.4601-02	.6860	5.032	601.0
81	22.500	.74000	1368.0	.1568	.2155	.2727	.9220	.1395-01	.8025-02	1.106	7.936	612.8
81	22.500	.75000	1369.0	.1561	.2290	.3102	.9220	.1587-01	.7986-02	.9410	6.688	632.7
82	22.500	.76500	1370.0	.1171	.1558	.1911	.9220	.9776-02	.5990-02	.9050	6.648	599.0
82	22.500	.77100	1371.0	.1037	.1343	.1609	.9220	.8233-02	.5303-02	.8720	6.342	585.6
81	22.500	.92500	1372.0	.6270-01	.8020-01	.9500-01	.9220	.4861-02	.3209-02	.5530	4.034	578.3
81	22.500	.93900	1374.0	.1169	.1538	.1869	.9220	.9563-02	.5982-02	.9350	6.772	594.2
81	24.400	.95300	1433.0	.1336	.1815	.2111	.9305	.1080-01	.6835-02	.9710	6.985	608.5
81	35.000	.75000-01	1321.0	.1882	.2474	.2850	.9291	.1458-01	.9628-02	1.509	10.58	593.9

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR18)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
81	35.000	.11000	1322.0	.1449	.1865	.2119	.9291	.1084-01	.7413-02	1.247	9.240	582.3
81	35.600	.95300	1434.0	.1070	.1404	.1609	.9297	.8235-02	.5473-02	.8620	6.244	593.1
81	40.000	.95300	1435.0	.8810-01	.1136	.1290	.9294	.6599-02	.4510-02	.7550	5.501	583.1
81	45.000	.74000	1375.0	.1390	.1992	.2629	.9220	.1346-01	.7112-02	.8830	6.403	626.4
81	45.000	.75000	1376.0	.8370-01	.1317	.1940	.9220	.9925-02	.4281-02	.4410	3.163	647.6
82	45.000	.76500	1377.0	.1111	.1658	.2288	.9220	.1170-01	.5684-02	.6470	4.587	636.3
82	45.000	.77100	1378.0	.8430-01	.1254	.1723	.9220	.8812-02	.4314-02	.4940	3.510	635.4
82	45.000	.81500	1379.0	.9540-01	.1266	.1550	.9220	.7929-02	.4880-02	.7420	5.367	597.9
82	45.000	.88400	1381.0	.3050-01	.3950-01	.4740-01	.9220	.2424-02	.1561-02	.2570	1.867	585.6
82	45.000	.90700	1382.0	.2610-01	.3320-01	.3930-01	.9220	.2010-02	.1334-02	.2320	1.697	575.9
81	65.000	.11000	1323.0	.2093	.2770	.3238	.9277	.1657-01	.1071-01	1.646	11.71	596.9
81	67.500	.74000	1383.0	.1432	.2068	.2753	.9220	.1409-01	.7329-02	.8950	6.479	628.5
81	67.500	.75000	1384.0	.1120	.1762	.2595	.9220	.1328-01	.5733-02	.5910	4.238	647.5
82	67.500	.77100	1385.0	.8500-01	.1178	.1503	.9220	.7689-02	.4347-02	.5850	4.194	615.4
81	76.000	.10000+00	1324.0	.1423	.1861	.2163	.9274	.1107-01	.7280-02	1.159	8.405	591.4
81	76.000	.14100	1386.0	.1631	.2242	.2838	.9220	.1452-01	.8345-02	1.149	8.244	612.9
81	76.000	.14800	1387.0	.1244	.1603	.1912	.9220	.9786-02	.6367-02	1.067	7.772	582.9
81	76.000	.15500	1388.0	.1098	.1382	.1617	.9220	.8275-02	.5616-02	1.023	7.507	568.3
81	76.000	.16200	1389.0	.8970-01	.1125	.1313	.9220	.6717-02	.4590-02	.8490	6.234	565.7
81	76.000	.25000	1390.0	.1720-01	.2100-01	.2390-01	.9220	.1223-02	.8790-03	.1830	1.382	542.5
81	77.500	.95300	1436.0	.4200-01	.5200-01	.5820-01	.9279	.2976-02	.2148-02	.4180	3.085	556.0
81	77.500	.99400	1439.0	.4870-01	.6150-01	.6960-01	.9279	.3559-02	.2490-02	.4480	3.285	570.5
82	90.000	.15000-01	1325.0	.2840	.3761	.4411	.9273	.2256-01	.1453-01	2.224	16.36	596.9
81	90.000	.25000-01	1326.0	.3765	.5216	.6322	.9273	.3235-01	.1927-01	2.600	18.33	615.6
82	90.000	.40000-01	1327.0	.2966	.3922	.4594	.9273	.2350-01	.1517-01	2.335	16.89	596.1
81	90.000	.60000-01	1328.0	.2162	.2824	.3280	.9273	.1678-01	.1106-01	1.771	12.04	590.5
81	90.000	.75000-01	1329.0	.1084	.1385	.1585	.9273	.8110-02	.5547-02	.9580	6.457	577.9
82	90.000	.13230	1479.0	.4301	.8395	1.798	.9220	.9200-01	.2200-01	1.692	11.79	673.1
82	90.000	.13390	1480.0	.3981	.8136	1.958	.9220	.1002	.2036-01	1.495	10.41	676.6
82	90.000	.13560	1481.0	.3033	.5192	.8632	.9220	.4416-01	.1552-01	1.399	9.817	659.8
82	90.000	.13730	1482.0	.2464	.3777	.5383	.9220	.2754-01	.1260-01	1.360	9.620	642.1
82	90.000	.13890	1483.0	.1846	.2621	.3428	.9220	.1753-01	.9444-02	1.197	8.549	623.2
82	90.000	.55000	1391.0	.4610-01	.5830-01	.6840-01	.9220	.3498-02	.2358-02	.4230	3.101	570.5
82	90.000	.65000	1392.0	.4070-01	.5150-01	.6050-01	.9220	.3096-02	.2080-02	.3710	2.716	571.7
81	90.000	.74000	1393.0	.1870-01	.2310-01	.2670-01	.9220	.1365-02	.9553-03	.1860	1.398	555.7
81	90.000	.76500	1394.0	.1604	.2064	.2459	.9220	.1258-01	.8207-02	1.381	10.06	582.2
81	90.000	.77100	1395.0	.8180-01	.1028	.1200	.9220	.6143-02	.4186-02	.7700	5.650	566.7
81	90.000	.81500	1396.0	.2090-01	.2590-01	.2980-01	.9220	.1526-02	.1069-02	.2090	1.572	554.8
81	90.000	.83700	1397.0	.1410-01	.1740-01	.2010-01	.9220	.1030-02	.7197-03	.1400	1.032	556.3
81	90.000	.88400	1398.0	.1750-01	.2180-01	.2530-01	.9220	.1293-02	.8944-03	.1700	1.250	560.7
81	90.000	.89400	1399.0	.4780-01	.5930-01	.6850-01	.9220	.3503-02	.2448-02	.4760	3.512	556.2
81	90.000	.90700	1400.0	.3780-01	.4700-01	.5450-01	.9220	.2787-02	.1933-02	.3690	2.721	559.5
81	90.000	.91700	1401.0	.3980-01	.4940-01	.5710-01	.9220	.2921-02	.2038-02	.3940	2.910	557.0

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR18)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
81	90.000	.93200	1402.0	.3760-01	.4700-01	.5450-01	.9220	.2790-02	.1926-02	.3640	2.681	561.5
81	90.000	.93900	1403.0	.3280-01	.4090-01	.4740-01	.9220	.2426-02	.1678-02	.3180	2.345	560.8
82	95.000	.13560	1484.0	.2826	.4507	.6756	.9220	.3456-01	.1446-01	1.454	10.25	649.4
82	95.000	.13730	1485.0	.2736	.4109	.5717	.9220	.2925-01	.1399-01	1.570	11.13	637.8
82	95.000	.13890	1486.0	.2272	.3362	.4597	.9220	.2352-01	.1162-01	1.344	9.544	634.4
82	95.000	.14560	1487.0	.1917	.2509	.3034	.9220	.1552-01	.9807-02	1.559	11.31	591.1
82	95.000	.14730	1488.0	.1524	.1931	.2269	.9220	.1161-01	.7798-02	1.390	10.18	571.8
81	104.00	.10000+00	1330.0	.1756	.2306	.2687	.9274	.1375-01	.8984-02	1.412	10.23	593.4
81	104.00	.12000	1404.0	.3004	.4432	.6040	.9220	.3091-01	.1537-01	1.790	12.71	634.1
81	104.00	.12700	1405.0	.3009	.4285	.5619	.9220	.2875-01	.1540-01	1.941	13.85	624.5
81	104.00	.13400	1406.0	.2750	.4228	.6047	.9220	.3094-01	.1407-01	1.511	10.69	643.2
81	104.00	.14100	1407.0	.2553	.3802	.5238	.9220	.2681-01	.1306-01	1.492	10.58	636.4
81	104.00	.14800	1408.0	.1338	.1707	.2018	.9220	.1032-01	.6849-02	1.191	8.702	576.6
81	104.00	.15500	1409.0	.1336	.1700	.2005	.9220	.1026-01	.6838-02	1.200	8.771	575.1
81	104.00	.16200	1410.0	.1108	.1405	.1653	.9220	.8461-02	.5671-02	1.007	7.368	573.0
81	104.00	.17300	1411.0	.6300-01	.7910-01	.9250-01	.9220	.4732-02	.3221-02	.5910	4.337	567.1
81	104.00	.18000	1412.0	.5310-01	.6640-01	.7720-01	.9220	.3952-02	.2716-02	.5090	3.740	563.3
81	104.00	.18600	1413.0	.4880-01	.6080-01	.7050-01	.9220	.3605-02	.2499-02	.4770	3.511	559.8
81	104.00	.19300	1414.0	.4850-01	.6020-01	.6970-01	.9220	.3565-02	.2482-02	.4780	3.528	557.8
81	104.00	.20000	1415.0	.4690-01	.5820-01	.6730-01	.9220	.3445-02	.2400-02	.4630	3.415	557.6
81	104.00	.25000	1416.0	.2800-01	.3460-01	.4000-01	.9220	.2045-02	.1433-02	.2800	2.105	555.0
82	112.00	.13560	1489.0	.1484	.1934	.2330	.9220	.1192-01	.7589-02	1.222	8.876	589.0
82	112.00	.13730	1490.0	.1519	.2014	.2464	.9220	.1260-01	.7771-02	1.185	8.571	597.5
82	112.00	.13890	1491.0	.1545	.2074	.2566	.9220	.1313-01	.7903-02	1.162	8.378	603.0
82	112.00	.14560	1492.0	.1660	.2153	.2584	.9220	.1322-01	.8490-02	1.389	10.10	586.4
82	112.00	.14730	1493.0	.1488	.1958	.2379	.9220	.1217-01	.7612-02	1.189	8.614	593.8
81	112.50	.74000	1417.0	.1079	.1403	.1687	.9220	.8635-02	.5522-02	.8970	6.513	588.2
81	112.50	.75000	1418.0	.1297	.1703	.2066	.9220	.1057-01	.6635-02	1.043	7.557	593.4
82	112.50	.77100	1419.0	.7440-01	.9360-01	.1094	.9220	.5597-02	.3807-02	.6970	5.201	567.0
81	112.50	.92500	1420.0	.3090-01	.3840-01	.4440-01	.9220	.2273-02	.1581-02	.3040	2.240	558.3
81	112.50	.93200	1421.0	.2090-01	.2610-01	.3030-01	.9220	.1550-02	.1068-02	.2010	1.479	562.3
81	112.50	.93900	1422.0	.1560-01	.1950-01	.2260-01	.9220	.1156-02	.7978-03	.1510	1.111	561.5
81	112.50	.95300	1440.0	.1670-01	.2090-01	.2340-01	.9282	.1199-02	.8534-03	.1600	1.175	563.3
82	112.50	.96700	1441.0	.2010-01	.2520-01	.2830-01	.9282	.1448-02	.1027-02	.1910	1.401	564.5
82	112.50	.99400	1443.0	.1680-01	.2130-01	.2410-01	.9282	.1235-02	.8605-03	.1530	1.119	572.4
82	135.00	.80000-02	1331.0	.4039	.5457	.6427	.9285	.3288-01	.2066-01	2.983	22.61	605.7
81	135.00	.25000-01	1332.0	.3547	.4867	.5795	.9285	.2965-01	.1815-01	2.510	18.02	612.2
82	135.00	.50000-01	1333.0	.2513	.3295	.3804	.9285	.1946-01	.1285-01	2.031	14.72	592.0
81	135.00	.75000-01	1334.0	.1108	.1421	.1618	.9285	.8282-02	.5668-02	.9640	7.147	580.5
81	135.00	.10000+00	1335.0	.1270	.1630	.1856	.9285	.9497-02	.6499-02	1.105	8.057	580.5
81	135.00	.40000	1423.0	.6480-01	.8210-01	.9660-01	.9220	.4941-02	.3315-02	.5900	4.390	572.6
82	135.00	.92500	1424.0	.1730-01	.2150-01	.2490-01	.9220	.1273-02	.8862-03	.1710	1.259	557.3
82	140.00	.13560	1494.0	.7380-01	.9300-01	.1089	.9220	.5570-02	.3775-02	.6860	5.030	568.4

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR18)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
82	140.00	.13730	1495.0	.7650-01	.9670-01	.1134	.9220	.5800-02	.3914-02	.7040	5.162	570.1
82	140.00	.13890	1496.0	.8200-01	.1037	.1219	.9220	.6235-02	.4193-02	.7490	5.486	571.4
82	140.00	.14560	1497.0	.8380-01	.1054	.1232	.9220	.6300-02	.4288-02	.7850	5.765	566.9
82	150.00	.14230	1499.0	.7170-01	.9000-01	.1050	.9220	.5371-02	.3669-02	.6780	4.979	565.3
82	180.00	.80000-02	1298.0	.4141	.5630	.6472	.9319	.3311-01	.2118-01	3.002	22.73	608.3
82	180.00	.15000-01	1299.0	.2594	.3364	.3768	.9319	.1928-01	.1327-01	2.174	15.55	586.2
81	180.00	.25000-01	1300.0	.3962	.5270	.5984	.9319	.3062-01	.2028-01	3.067	21.10	599.3
82	180.00	.50000-01	1301.0	.2603	.3375	.3780	.9319	.1934-01	.1331-01	2.182	15.11	586.1
81	180.00	.75000-01	1302.0	.1456	.1863	.2072	.9319	.1060-01	.7450-02	1.280	8.757	578.7
82	180.00	.10000+00	1303.0	.1873	.2433	.2727	.9319	.1395-01	.9579-02	1.561	11.34	587.1
81	225.00	.98000	1425.0	.8770-01	.1165	.1275	.9369	.6523-02	.4486-02	.6810	4.920	598.8
81	225.00	.99400	1426.0	.4900-01	.6510-01	.7120-01	.9369	.3644-02	.2506-02	.3800	2.746	598.9
81	263.00	.13600	1336.0	.4570-01	.5740-01	.6680-01	.9228	.3416-02	.2337-02	.4290	3.146	567.2
82	263.00	.20000	1472.0	.5140-01	.6360-01	.7310-01	.9228	.3739-02	.2628-02	.5120	3.780	555.2
82	263.00	.30000	1337.0	.5920-01	.7350-01	.8470-01	.9228	.4333-02	.3026-02	.5810	4.355	558.1
82	263.00	.40000	1473.0	.5000-01	.6310-01	.7370-01	.9228	.3768-02	.2558-02	.4610	3.377	569.9
82	263.00	.50000	1474.0	.5360-01	.6750-01	.7850-01	.9228	.4017-02	.2741-02	.4990	3.663	567.9
82	263.00	.60000	1475.0	.5060-01	.6340-01	.7340-01	.9228	.3757-02	.2587-02	.4810	3.533	564.2
82	263.00	.75000	1338.0	.4150-01	.5330-01	.6300-01	.9228	.3221-02	.2123-02	.3600	2.629	580.2
82	263.00	.81500	1339.0	.3350-01	.4180-01	.4840-01	.9228	.2476-02	.1713-02	.3220	2.369	562.1
82	263.00	.83700	1340.0	.2700-01	.3370-01	.3900-01	.9228	.1994-02	.1383-02	.2610	1.922	561.2
82	263.00	.88400	1341.0	.2100-01	.2690-01	.3170-01	.9228	.1622-02	.1075-02	.1840	1.345	578.6
82	263.00	.89400	1342.0	.5240-01	.6590-01	.7660-01	.9228	.3918-02	.2682-02	.4920	3.612	566.6
82	263.00	.92800	1477.0	.4800-01	.6050-01	.7040-01	.9228	.3603-02	.2457-02	.4470	3.281	568.0
81	263.00	.93900	1344.0	.7370-01	.9470-01	.1121	.9228	.5734-02	.3770-02	.6370	4.644	581.5
82	270.00	.80000-02	1304.0	.2360	.3068	.3307	.9379	.1692-01	.1207-01	1.960	15.26	587.6
82	270.00	.50000-01	1306.0	.2231	.2945	.3192	.9379	.1633-01	.1141-01	1.765	12.16	595.4
81	270.00	.75000-01	1307.0	.1241	.1627	.1759	.9379	.9000-02	.6353-02	1.006	6.945	592.2
82	270.00	.10000+00	1308.0	.1645	.2184	.2371	.9379	.1213-01	.8415-02	1.279	9.248	598.0
81	270.00	.11500	1345.0	.1232	.1625	.1965	.9229	.1006-01	.6305-02	.9790	7.085	595.3
81	277.00	.13600	1346.0	.3910-01	.4900-01	.5690-01	.9228	.2910-02	.2000-02	.3700	2.721	565.4
81	277.00	.30000	1347.0	.6130-01	.7550-01	.8630-01	.9228	.4416-02	.3138-02	.6280	4.727	550.5
82	277.00	.40000	1464.0	.4510-01	.5680-01	.6610-01	.9228	.3379-02	.2309-02	.4220	3.096	567.3
82	277.00	.60000	1466.0	.4630-01	.5840-01	.6800-01	.9228	.3479-02	.2367-02	.4290	3.144	568.9
82	277.00	.70000	1467.0	.4450-01	.5600-01	.6510-01	.9228	.3329-02	.2276-02	.4160	3.055	567.1
81	277.00	.75000	1348.0	.3430-01	.4410-01	.5230-01	.9228	.2676-02	.1753-02	.2940	2.145	582.6
81	277.00	.81500	1349.0	.4080-01	.5120-01	.5940-01	.9228	.3038-02	.2087-02	.3860	2.837	565.5
81	277.00	.83700	1350.0	.3650-01	.4570-01	.5300-01	.9228	.2713-02	.1867-02	.3470	2.548	564.8
81	277.00	.88400	1351.0	.5540-01	.7120-01	.8430-01	.9228	.4315-02	.2834-02	.4780	3.484	581.8
81	277.00	.89400	1352.0	.1042	.1312	.1527	.9228	.7812-02	.5334-02	.9740	7.144	568.0
82	277.00	.90000	1468.0	.7420-01	.9480-01	.1116	.9228	.5711-02	.3797-02	.6550	4.787	577.4
82	277.00	.90700	1353.0	.5410-01	.7000-01	.8340-01	.9228	.4265-02	.2767-02	.4560	3.317	585.2
82	277.00	.92100	1469.0	.6510-01	.8210-01	.9560-01	.9228	.4891-02	.3332-02	.6050	4.436	568.5

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR18)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
82	277.00	.92800	1470.0	.6910-01	.8830-01	.1041	.9228	.5324-02	.3532-02	.6080	4.435	578.0
82	277.00	.93700	1471.0	.8520-01	.1104	.1316	.9228	.6732-02	.4357-02	.7150	5.198	586.0
81	277.00	.93900	1354.0	.7610-01	.1007	.1221	.9228	.6250-02	.3896-02	.5990	4.331	596.8
82	335.00	.11000	1309.0	.1979	.2588	.2865	.9343	.1466-01	.1012-01	1.613	11.70	590.7
81	337.50	.74000	1355.0	.1806	.2412	.2966	.9221	.1518-01	.9242-02	1.381	9.968	601.1
81	337.50	.75000	1356.0	.2170	.2970	.3739	.9221	.1914-01	.1110-01	1.546	11.29	611.3
82	337.50	.76500	1357.0	.9350-01	.1187	.1396	.9221	.7143-02	.4783-02	.8460	6.295	573.2
82	337.50	.92500	1359.0	.7930-01	.1042	.1264	.9221	.6468-02	.4054-02	.6340	4.597	593.5
82	337.50	.93200	1360.0	.1035	.1391	.1719	.9221	.8795-02	.5297-02	.7780	5.608	603.2
82	337.50	.93900	1361.0	.1108	.1523	.1924	.9221	.9841-02	.5668-02	.7810	5.603	612.3

RIGHT SRB

PARAMETRIC DATA

ALPHA = .0000 BETA = 9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
94	.1000-01	9.100	4.020	72.80	754.0	178.2	.4670	5.281	2629.	.2198-03	.1434-06	4.029

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
94	.5122-01	.1145-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
94	22.500	.72400	1367.0	.1579	.2139	.2670	.9220	.1368-01	.8087-02	1.164	8.505	610.1
94	22.500	.76500	1370.0	.1899	.2610	.3301	.9220	.1691-01	.9729-02	1.347	9.819	615.6
94	22.500	.77100	1371.0	.1724	.2291	.2807	.9220	.1438-01	.8833-02	1.347	9.721	601.6
94	45.000	.76500	1377.0	.3040	.4704	.6785	.9220	.3475-01	.1557-01	1.659	11.71	647.5
94	45.000	.77100	1378.0	.2635	.3722	.4842	.9220	.2480-01	.1350-01	1.741	12.42	625.0
94	45.000	.81500	1379.0	.6400-01	.8570-01	.1058	.9220	.5418-02	.3277-02	.4880	3.513	605.2
94	45.000	.88400	1381.0	.4700-01	.6110-01	.7340-01	.9220	.3762-02	.2409-02	.3940	2.858	590.5
94	45.000	.90700	1382.0	.6580-01	.8370-01	.9870-01	.9220	.5054-02	.3372-02	.5960	4.352	577.3
94	67.500	.77100	1385.0	.2908	.4079	.5267	.9220	.2698-01	.1490-01	1.956	13.97	622.8
94	90.000	.15000-01	1325.0	.3128	.4162	.5003	.9246	.2563-01	.1602-01	2.432	17.84	602.3
94	90.000	.40000-01	1327.0	.2986	.3988	.4809	.9246	.2464-01	.1529-01	2.294	16.53	604.1
94	90.000	.13230	1479.0	.3230	.5969	1.137	.9220	.5822-01	.1654-01	1.359	9.482	671.9
94	90.000	.13390	1480.0	.3189	.6379	1.451	.9220	.7432-01	.1633-01	1.231	8.561	678.7
94	90.000	.13560	1481.0	.2875	.4939	.8260	.9220	.4231-01	.1472-01	1.328	9.301	663.8
94	90.000	.13730	1482.0	.2873	.4494	.6572	.9220	.3366-01	.1471-01	1.538	10.84	649.6
94	90.000	.13890	1483.0	.2224	.3271	.4442	.9220	.2275-01	.1139-01	1.342	9.521	636.3
94	90.000	.55000	1391.0	.5730-01	.7300-01	.8620-01	.9220	.4414-02	.2937-02	.5170	3.771	578.2
94	90.000	.65000	1392.0	.4050-01	.5150-01	.6060-01	.9220	.3106-02	.2075-02	.3680	2.686	576.9
94	95.000	.13560	1484.0	.2757	.4372	.6509	.9220	.3334-01	.1412-01	1.441	10.14	652.0
94	95.000	.13730	1485.0	.2823	.4291	.6055	.9220	.3102-01	.1446-01	1.593	11.26	643.9
94	95.000	.13890	1486.0	.2758	.4150	.5785	.9220	.2963-01	.1413-01	1.588	11.24	641.7
94	95.000	.14560	1487.0	.2082	.2737	.3323	.9220	.1702-01	.1066-01	1.679	12.15	596.6

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR19)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
94	95.000	.14730	1488.0	.1545	.1959	.2306	.9220	.1181-01	.7913-02	1.410	10.30	575.9
94	112.00	.13560	1489.0	.1799	.2367	.2876	.9220	.1473-01	.9215-02	1.447	10.47	597.0
94	112.00	.13730	1490.0	.1867	.2512	.3114	.9220	.1595-01	.9564-02	1.405	10.11	607.2
94	112.00	.13890	1491.0	.1907	.2607	.3281	.9220	.1681-01	.9770-02	1.373	9.847	613.6
94	112.00	.14560	1492.0	.1956	.2564	.3105	.9220	.1590-01	.1002-01	1.592	11.52	595.1
94	112.00	.14730	1493.0	.1721	.2294	.2821	.9220	.1445-01	.8815-02	1.330	9.588	603.2
94	112.50	.77100	1419.0	.7760-01	.9760-01	.1141	.9220	.5842-02	.3975-02	.7320	5.455	570.0
94	112.50	.96700	1441.0	.2480-01	.3150-01	.3620-01	.9254	.1857-02	.1272-02	.2270	1.659	575.5
94	112.50	.99400	1443.0	.2300-01	.2930-01	.3390-01	.9254	.1734-02	.1177-02	.2060	1.505	578.9
94	135.00	.80000-02	1331.0	.4138	.5709	.6967	.9262	.3569-01	.2120-01	2.905	21.90	617.0
94	135.00	.50000-01	1333.0	.2721	.3599	.4252	.9262	.2178-01	.1394-01	2.154	15.56	599.5
94	135.00	.92500	1424.0	.1730-01	.2160-01	.2510-01	.9220	.1287-02	.8843-03	.1660	1.222	565.9
94	140.00	.13560	1494.0	.8730-01	.1104	.1296	.9220	.6641-02	.4473-02	.8060	5.898	573.8
94	140.00	.13730	1495.0	.8930-01	.1134	.1336	.9220	.6843-02	.4577-02	.8130	5.938	576.5
94	140.00	.13890	1496.0	.9400-01	.1195	.1410	.9220	.7223-02	.4813-02	.8480	6.194	577.8
94	140.00	.14560	1497.0	.1005	.1271	.1491	.9220	.7638-02	.5150-02	.9300	6.804	573.5
94	150.00	.14230	1499.0	.8480-01	.1069	.1251	.9220	.6407-02	.4343-02	.7930	5.806	571.5
94	180.00	.80000-02	1298.0	.4258	.5941	.6942	.9318	.3556-01	.2181-01	2.903	21.84	621.0
94	180.00	.15000-01	1299.0	.2823	.3701	.4174	.9318	.2138-01	.1446-01	2.299	16.37	595.1
94	180.00	.50000-01	1301.0	.2885	.3778	.4259	.9318	.2181-01	.1478-01	2.358	16.26	594.5
94	180.00	.10000+00	1303.0	.2034	.2644	.2969	.9318	.1521-01	.1042-01	1.702	12.35	590.6
94	263.00	.20000	1472.0	.6680-01	.8330-01	.9530-01	.9246	.4880-02	.3421-02	.6500	4.783	563.9
94	263.00	.30000	1337.0	.7420-01	.9280-01	.1063	.9246	.5444-02	.3803-02	.7170	5.356	565.5
94	263.00	.40000	1473.0	.6350-01	.7990-01	.9200-01	.9246	.4711-02	.3253-02	.5970	4.378	570.4
94	263.00	.50000	1474.0	.6250-01	.7930-01	.9190-01	.9246	.4707-02	.3200-02	.5680	4.153	576.5
94	263.00	.60000	1475.0	.6180-01	.7850-01	.9090-01	.9246	.4655-02	.3167-02	.5630	4.114	576.3
94	263.00	.75000	1338.0	.6720-01	.8860-01	.1057	.9246	.5417-02	.3441-02	.5360	3.875	598.2
94	263.00	.81500	1339.0	.4120-01	.5240-01	.6080-01	.9246	.3114-02	.2111-02	.3720	2.720	577.6
94	263.00	.83700	1340.0	.2880-01	.3650-01	.4230-01	.9246	.2165-02	.1476-02	.2640	1.928	575.4
94	263.00	.88400	1341.0	.1370-01	.1800-01	.2150-01	.9246	.1099-02	.7031-03	.1110	.8030	596.3
94	263.00	.89400	1342.0	.6170-01	.7920-01	.9250-01	.9246	.4736-02	.3161-02	.5400	3.935	583.1
94	263.00	.92800	1477.0	.5190-01	.6670-01	.7800-01	.9246	.3996-02	.2658-02	.4510	3.286	584.2
94	270.00	.80000-02	1304.0	.2649	.3502	.3658	.9434	.1874-01	.1357-01	2.100	16.25	599.3
94	270.00	.50000-01	1306.0	.2652	.3530	.3691	.9434	.1891-01	.1358-01	2.059	14.14	602.5
94	270.00	.10000+00	1308.0	.1997	.2663	.2786	.9434	.1427-01	.1023-01	1.540	11.10	603.5
94	277.00	.40000	1464.0	.5840-01	.7330-01	.8420-01	.9246	.4311-02	.2993-02	.5570	4.085	568.1
94	277.00	.60000	1466.0	.5450-01	.6960-01	.8110-01	.9246	.4154-02	.2790-02	.4830	3.521	580.9
94	277.00	.70000	1467.0	.6190-01	.7880-01	.9140-01	.9246	.4683-02	.3170-02	.5570	4.069	578.2
94	277.00	.90000	1468.0	.5170-01	.6750-01	.7990-01	.9246	.4095-02	.2648-02	.4260	3.085	593.2
94	277.00	.90700	1353.0	.2340-01	.3110-01	.3750-01	.9246	.1920-02	.1196-02	.1800	1.301	603.2
94	277.00	.92100	1469.0	.7960-01	.1027	.1205	.9246	.6171-02	.4078-02	.6840	4.970	586.4
94	277.00	.92800	1470.0	.7100-01	.9340-01	.1112	.9246	.5697-02	.3635-02	.5710	4.127	597.1
94	277.00	.93700	1471.0	.8370-01	.1121	.1354	.9246	.6938-02	.4285-02	.6370	4.589	605.4

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR19)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
94	335.00	.11000	1309.0	.2298	.3015	.3301	.9361	.1691-01	.1177-01	1.867	13.51	595.5
94	337.50	.76500	1357.0	.1022	.1313	.1558	.9224	.7979-02	.5233-02	.8900	6.588	584.0
94	337.50	.92500	1359.0	.8720-01	.1176	.1455	.9224	.7456-02	.4466-02	.6520	4.688	608.1
94	337.50	.93200	1360.0	.1129	.1564	.1986	.9224	.1017-01	.5783-02	.7840	5.612	618.5
94	337.50	.93900	1361.0	.1202	.1716	.2245	.9224	.1150-01	.6158-02	.7760	5.527	628.1

RIGHT SRB

PARAMETRIC DATA

ALPHA = 5.000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
99	5.010	-9.100	4.020	72.80	727.0	171.8	.4670	5.280	2582.	.2280-03	.1383-06	4.256
100	5.010	-9.100	4.020	72.80	721.0	170.3	.4670	5.278	2571.	.2298-03	.1371-06	4.308

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
99	.5096-01	.1118-01
100	.5089-01	.1113-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
99	.00000	.25000-01	1311.0	.1270	.1636	.1884	.9272	.9600-02	.6474-02	1.052	7.606	564.5
99	.00000	.76500	1362.0	.4660-01	.5840-01	.6810-01	.9220	.3471-02	.2374-02	.4260	3.209	547.7
99	.00000	.83700	1364.0	.2040-01	.2580-01	.3020-01	.9220	.1541-02	.1041-02	.1820	1.344	552.3
99	.00000	.88400	1365.0	.4460-01	.5670-01	.6690-01	.9220	.3409-02	.2273-02	.3870	2.855	556.8
99	.00000	.90700	1366.0	.4630-01	.5880-01	.6930-01	.9220	.3532-02	.2361-02	.4040	2.981	556.0
99	5.0000	.75000-01	1313.0	.6800-01	.8640-01	.9810-01	.9278	.5000-02	.3465-02	.5920	4.230	556.1
99	15.600	.95300	1431.0	.6010-01	.7630-01	.8550-01	.9300	.4360-02	.3062-02	.5230	3.861	556.1
99	20.000	.75000-01	1316.0	.7450-01	.9550-01	.1076	.9301	.5482-02	.3798-02	.6280	4.474	561.6
99	20.000	.10000+00	1318.0	.6750-01	.8660-01	.9760-01	.9301	.4975-02	.3440-02	.5660	4.167	562.3
99	20.000	.11000	1319.0	.6920-01	.8860-01	.9970-01	.9301	.5079-02	.3527-02	.5860	4.315	560.8
99	20.000	.95300	1432.0	.5740-01	.7360-01	.8260-01	.9308	.4208-02	.2923-02	.4820	3.544	562.2
100	22.500	.72400	1367.0	.7700-01	.9960-01	.1192	.9220	.6064-02	.3918-02	.6230	4.659	561.9
99	22.500	.74000	1368.0	.7720-01	.1002	.1203	.9220	.6133-02	.3933-02	.6220	4.559	568.9
99	22.500	.75000	1369.0	.6470-01	.8430-01	.1014	.9220	.5169-02	.3298-02	.5170	3.787	570.3
100	22.500	.76500	1370.0	.5210-01	.6580-01	.7710-01	.9220	.3922-02	.2651-02	.4600	3.469	547.3
100	22.500	.77100	1371.0	.3940-01	.4980-01	.5830-01	.9220	.2968-02	.2007-02	.3480	2.583	547.2
99	22.500	.92500	1372.0	.3830-01	.4860-01	.5720-01	.9220	.2914-02	.1950-02	.3340	2.467	555.6
99	22.500	.93900	1374.0	.5110-01	.6470-01	.7610-01	.9220	.3879-02	.2603-02	.4490	3.314	554.6
99	24.400	.95300	1433.0	.7770-01	.9890-01	.1099	.9316	.5601-02	.3960-02	.6730	4.962	557.1
99	35.000	.75000-01	1321.0	.7250-01	.9290-01	.1029	.9329	.5243-02	.3693-02	.6090	4.339	562.0

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR20)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
99	35.000	.11000	1322.0	.7440-01	.9540-01	.1056	.9329	.5380-02	.3790-02	.6260	4.684	561.9
99	35.600	.95300	1434.0	.8120-01	.1034	.1135	.9337	.5786-02	.4139-02	.7000	5.165	557.8
99	40.000	.95300	1435.0	.7580-01	.9650-01	.1054	.9346	.5370-02	.3862-02	.6530	4.819	557.8
99	45.000	.74000	1375.0	.9100-01	.1185	.1423	.9223	.7249-02	.4638-02	.7270	5.422	570.1
99	45.000	.75000	1376.0	.8120-01	.1057	.1271	.9223	.6476-02	.4136-02	.6470	4.819	570.6
100	45.000	.76500	1377.0	.4840-01	.6190-01	.7320-01	.9223	.3724-02	.2464-02	.4080	3.011	555.3
100	45.000	.77100	1378.0	.3250-01	.4150-01	.4900-01	.9223	.2494-02	.1655-02	.2760	2.037	554.3
100	45.000	.81500	1379.0	.3270-01	.4140-01	.4850-01	.9223	.2468-02	.1666-02	.2870	2.129	548.4
100	45.000	.88400	1381.0	.3340-01	.4210-01	.4930-01	.9223	.2509-02	.1697-02	.2940	2.178	547.7
100	45.000	.90700	1382.0	.4040-01	.5100-01	.5970-01	.9223	.3038-02	.2057-02	.3570	2.645	547.4
99	65.000	.11000	1323.0	.1135	.1460	.1558	.9390	.7942-02	.5783-02	.9430	6.821	563.9
99	67.500	.74000	1383.0	.1114	.1452	.1731	.9234	.8820-02	.5677-02	.8870	6.611	570.7
99	67.500	.75000	1384.0	.1139	.1495	.1794	.9234	.9144-02	.5805-02	.8850	6.586	574.4
100	67.500	.77100	1385.0	.4380-01	.5570-01	.6510-01	.9234	.3311-02	.2228-02	.3760	2.783	552.0
99	76.000	.10000+00	1324.0	.1153	.1488	.1569	.9411	.7994-02	.5878-02	.9510	6.986	565.2
99	76.000	.14100	1386.0	.1072	.1383	.1629	.9239	.8302-02	.5463-02	.8840	6.494	565.2
99	76.000	.14800	1387.0	.6410-01	.8060-01	.9310-01	.9239	.4744-02	.3268-02	.5810	4.307	549.1
99	76.000	.15500	1388.0	.4690-01	.5850-01	.6720-01	.9239	.3425-02	.2393-02	.4390	3.263	543.4
99	76.000	.16200	1389.0	.3670-01	.4560-01	.5210-01	.9239	.2658-02	.1870-02	.3490	2.599	540.2
99	77.500	.95300	1436.0	.4740-01	.5960-01	.6210-01	.9423	.3165-02	.2414-02	.4270	3.160	550.1
99	77.500	.99400	1439.0	.4580-01	.5890-01	.6160-01	.9423	.3140-02	.2334-02	.3820	2.807	563.4
100	90.000	.15000-01	1325.0	.2526	.3395	.3560	.9433	.1812-01	.1285-01	1.809	13.42	580.1
99	90.000	.25000-01	1326.0	.2579	.3569	.3763	.9433	.1918-01	.1314-01	1.723	12.26	595.9
100	90.000	.40000-01	1327.0	.1928	.2550	.2665	.9433	.1356-01	.9813-02	1.451	10.62	573.0
99	90.000	.60000-01	1328.0	.1194	.1576	.1646	.9433	.8390-02	.6083-02	.9120	6.248	577.0
99	90.000	.75000-01	1329.0	.7390-01	.9490-01	.9860-01	.9433	.5026-02	.3768-02	.6210	4.215	562.3
100	90.000	.13230	1479.0	.2480	.4832	.9297	.9247	.4731-01	.1262-01	.9350	6.599	646.8
100	90.000	.13390	1480.0	.2652	.4943	.8790	.9247	.4473-01	.1350-01	1.049	7.421	643.1
100	90.000	.13560	1481.0	.2504	.3809	.5175	.9247	.2634-01	.1274-01	1.341	9.610	615.6
100	90.000	.13730	1482.0	.2025	.2773	.3411	.9247	.1736-01	.1031-01	1.378	10.01	587.2
100	90.000	.13890	1483.0	.1422	.1849	.2181	.9247	.1110-01	.7238-02	1.130	8.307	564.7
100	90.000	.55000	1391.0	.7040-01	.8860-01	.1020	.9247	.5192-02	.3583-02	.6280	4.658	545.6
100	90.000	.65000	1392.0	.4120-01	.5190-01	.5970-01	.9247	.3038-02	.2096-02	.3670	2.725	545.6
99	90.000	.74000	1393.0	.3190-01	.4020-01	.4640-01	.9247	.2364-02	.1625-02	.2850	2.141	551.8
99	90.000	.76500	1394.0	.1043	.1341	.1569	.9247	.7997-02	.5314-02	.8680	6.380	563.7
99	90.000	.77100	1395.0	.6700-01	.8550-01	.9930-01	.9247	.5063-02	.3416-02	.5750	4.239	558.6
99	90.000	.81500	1396.0	.1990-01	.2530-01	.2940-01	.9247	.1496-02	.1015-02	.1730	1.296	556.8
99	90.000	.83700	1397.0	.2770-01	.3520-01	.4080-01	.9247	.2080-02	.1411-02	.2400	1.774	556.7
99	90.000	.88400	1398.0	.4770-01	.6050-01	.7000-01	.9247	.3566-02	.2430-02	.4180	3.086	555.0
99	90.000	.89400	1399.0	.4430-01	.5580-01	.6430-01	.9247	.3276-02	.2257-02	.3970	2.940	550.9
99	90.000	.90700	1400.0	.3680-01	.4630-01	.5340-01	.9247	.2722-02	.1873-02	.3290	2.435	551.3
99	90.000	.91700	1401.0	.3540-01	.4450-01	.5110-01	.9247	.2605-02	.1804-02	.3210	2.377	549.0
99	90.000	.93200	1402.0	.4260-01	.5370-01	.6190-01	.9247	.3157-02	.2168-02	.3790	2.806	552.0

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR20)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
99	90.000	.93900	1403.0	.4760-01	.6020-01	.6940-01	.9247	.3537-02	.2428-02	.4240	3.136	552.3
100	95.000	.13560	1484.0	.2019	.3125	.4311	.9249	.2194-01	.1028-01	1.046	7.487	619.0
100	95.000	.13730	1485.0	.1826	.2657	.3444	.9249	.1753-01	.9293-02	1.071	7.712	605.6
100	95.000	.13890	1486.0	.1645	.2346	.2985	.9249	.1519-01	.8372-02	1.010	7.290	600.2
100	95.000	.14560	1487.0	.1243	.1644	.1963	.9249	.9991-02	.6324-02	.9330	6.824	573.4
100	95.000	.14730	1488.0	.9740-01	.1254	.1465	.9249	.7455-02	.4959-02	.8020	5.908	559.2
99	104.00	.10000+00	1330.0	.1613	.2108	.2179	.9447	.1110-01	.8219-02	1.271	9.309	572.3
99	104.00	.12000	1404.0	.1883	.2780	.3638	.9252	.1854-01	.9597-02	1.081	7.756	614.3
99	104.00	.12700	1405.0	.1666	.2346	.2941	.9252	.1499-01	.8491-02	1.065	7.684	601.6
99	104.00	.13400	1406.0	.1831	.2727	.3599	.9252	.1834-01	.9330-02	1.032	7.395	616.3
99	104.00	.14100	1407.0	.1714	.2514	.3271	.9252	.1667-01	.8733-02	.9970	7.155	612.8
99	104.00	.14800	1408.0	.9520-01	.1245	.1468	.9252	.7481-02	.4853-02	.7510	5.498	572.3
99	104.00	.15500	1409.0	.9910-01	.1302	.1541	.9252	.7855-02	.5049-02	.7680	5.618	574.8
99	104.00	.16200	1410.0	.9060-01	.1190	.1409	.9252	.7179-02	.4615-02	.7020	5.135	574.8
99	104.00	.17300	1411.0	.7170-01	.9150-01	.1060	.9252	.5400-02	.3654-02	.6140	4.529	558.8
99	104.00	.18000	1412.0	.5580-01	.7070-01	.8140-01	.9252	.4148-02	.2844-02	.4910	3.631	554.2
99	104.00	.18600	1413.0	.4640-01	.5860-01	.6730-01	.9252	.3429-02	.2365-02	.4150	3.069	551.7
99	104.00	.19300	1414.0	.4060-01	.5100-01	.5850-01	.9252	.2981-02	.2067-02	.3560	2.712	549.8
99	104.00	.20000	1415.0	.3850-01	.4850-01	.5560-01	.9252	.2832-02	.1962-02	.3470	2.570	550.1
99	104.00	.25000	1416.0	.3500-01	.4410-01	.5060-01	.9252	.2577-02	.1782-02	.3140	2.364	550.7
100	112.00	.13560	1489.0	.1152	.1508	.1778	.9254	.9048-02	.5864-02	.8960	6.574	568.0
100	112.00	.13730	1490.0	.1247	.1648	.1958	.9254	.9963-02	.6345-02	.9400	6.878	572.7
100	112.00	.13890	1491.0	.1230	.1630	.1940	.9254	.9874-02	.6262-02	.9200	6.734	573.8
100	112.00	.14560	1492.0	.1265	.1640	.1921	.9254	.9775-02	.6437-02	1.013	7.453	563.4
100	112.00	.14730	1493.0	.1163	.1537	.1826	.9254	.9291-02	.5919-02	.8770	6.419	572.7
99	112.50	.74000	1417.0	.1324	.1791	.2166	.9254	.1104-01	.6748-02	.9420	6.844	587.4
99	112.50	.75000	1418.0	.1588	.2248	.2825	.9254	.1440-01	.8093-02	1.002	7.228	603.1
100	112.50	.77100	1419.0	.1439	.1908	.2273	.9254	.1157-01	.7324-02	1.073	7.984	574.3
99	112.50	.92500	1420.0	.3620-01	.4560-01	.5220-01	.9254	.2662-02	.1843-02	.3250	2.407	550.6
99	112.50	.93200	1421.0	.4390-01	.5570-01	.6410-01	.9254	.3266-02	.2239-02	.3860	2.851	554.6
99	112.50	.93900	1422.0	.4590-01	.5820-01	.6710-01	.9254	.3420-02	.2337-02	.4000	2.956	555.7
99	112.50	.95300	1440.0	.4670-01	.5940-01	.6060-01	.9462	.3089-02	.2382-02	.4080	3.008	555.9
100	112.50	.96700	1441.0	.6330-01	.8010-01	.8180-01	.9462	.4163-02	.3222-02	.5540	4.100	549.0
100	112.50	.99400	1443.0	.1920-01	.2500-01	.2560-01	.9462	.1301-02	.9759-03	.1520	1.114	565.4
100	135.00	.80000-02	1331.0	.3027	.4338	.4551	.9446	.2316-01	.1540-01	1.836	13.95	601.6
99	135.00	.25000-01	1332.0	.2703	.3837	.4020	.9446	.2049-01	.1377-01	1.693	12.21	604.0
100	135.00	.50000-01	1333.0	.2044	.2764	.2874	.9446	.1462-01	.1040-01	1.440	10.49	582.4
99	135.00	.75000-01	1334.0	.9670-01	.1280	.1327	.9446	.6762-02	.4928-02	.7320	5.431	578.5
99	135.00	.10000+00	1335.0	.1306	.1739	.1804	.9446	.9192-02	.6654-02	.9710	7.075	581.1
99	135.00	.40000	1423.0	.8820-01	.1136	.1325	.9252	.6754-02	.4493-02	.7300	5.458	564.5
100	135.00	.92500	1424.0	.3520-01	.4570-01	.5350-01	.9252	.2725-02	.1793-02	.2830	2.079	563.2
100	140.00	.13560	1494.0	.9280-01	.1215	.1437	.9250	.7311-02	.4724-02	.7220	5.296	568.0
100	140.00	.13730	1495.0	.8670-01	.1138	.1349	.9250	.6866-02	.4411-02	.6670	4.890	569.6

IH72. OTS W/PROTUBERANCES. RIGHT SRB HI/HREF

(RVZR20)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
100	140.00	.13890	1496.0	.9070-01	.1194	.1419	.9250	.7221-02	.4617-02	.6920	5.072	570.9
100	140.00	.14560	1497.0	.8230-01	.1066	.1251	.9250	.6366-02	.4188-02	.6620	4.867	562.8
100	150.00	.14230	1499.0	.8340-01	.1085	.1281	.9245	.6518-02	.4243-02	.6610	4.860	565.0
100	180.00	.80000-02	1298.0	.2899	.4150	.4654	.9375	.2368-01	.1475-01	1.764	13.40	601.3
99	180.00	.15000-01	1299.0	.2359	.3152	.3442	.9375	.1752-01	.1200-01	1.719	12.35	577.6
100	180.00	.25000-01	1300.0	.2829	.3870	.4263	.9375	.2172-01	.1442-01	1.948	13.46	591.8
99	180.00	.50000-01	1301.0	.1979	.2630	.2866	.9375	.1458-01	.1007-01	1.467	10.22	575.2
100	180.00	.75000-01	1302.0	.1235	.1630	.1772	.9375	.9031-02	.6293-02	.9430	6.460	577.1
99	225.00	.10000+00	1303.0	.1490	.2000	.2188	.9375	.1114-01	.7584-02	1.072	7.821	579.5
99	225.00	.98000	1425.0	.5990-01	.7790-01	.8890-01	.9295	.4532-02	.3052-02	.4790	3.511	570.0
99	263.00	.99+00	1426.0	.5090-01	.6610-01	.7540-01	.9295	.3844-02	.2592-02	.4080	2.990	569.6
100	263.00	.13600	1336.0	.1990-01	.2470-01	.2850-01	.9220	.1451-02	.1015-02	.1920	1.427	538.3
100	263.00	.20000	1472.0	.1500-01	.1840-01	.2110-01	.9220	.1074-02	.7653-03	.1500	1.122	525.3
100	263.00	.30000	1337.0	.1950-01	.2380-01	.2710-01	.9220	.1380-02	.9905-03	.1970	1.508	521.6
100	263.00	.40000	1473.0	.1590-01	.1970-01	.2280-01	.9220	.1160-02	.8097-03	.1510	1.125	534.6
100	263.00	.50000	1474.0	.2300-01	.2850-01	.3300-01	.9220	.1677-02	.1170-02	.2180	1.623	534.9
100	263.00	.60000	1475.0	.2940-01	.3630-01	.4180-01	.9220	.2128-02	.1497-02	.2840	2.124	531.1
100	263.00	.75000	1338.0	.3830-01	.4780-01	.5560-01	.9220	.2830-02	.1949-02	.3520	2.616	540.4
100	263.00	.81500	1339.0	.2810-01	.3480-01	.4020-01	.9220	.2046-02	.1428-02	.2660	1.984	534.7
100	263.00	.83700	1340.0	.2520-0.	3130-01	.3620-01	.9220	.1840-02	.1284-02	.2390	1.784	534.7
100	263.00	.88400	1341.0	.4170-01	.5200-01	.6040-01	.9220	.3074-02	.2124-02	.3870	2.879	538.8
100	263.00	.89400	1342.0	.4420-01	.5490-01	.6360-01	.9220	.3235-02	.2249-02	.4150	3.095	536.3
100	263.00	.92800	1477.0	.4470-01	.5590-01	.6510-01	.9220	.3315-02	.2272-02	.4060	3.019	542.1
99	263.00	.93900	1344.0	.4930-01	.6220-01	.7300-01	.9220	.3721-02	.2510-02	.4370	3.235	552.7
100	270.00	.80000-02	1304.0	.1624	.2088	.2443	.9245	.1243-01	.8267-02	1.342	10.60	558.5
100	270.00	.50000-01	1306.0	.9010-01	.1139	.1315	.9245	.6693-02	.4588-02	.7930	5.600	547.9
99	270.00	.75000-01	1307.0	.5720-01	.7240-01	.8390-01	.9245	.4273-02	.2914-02	.5020	3.534	554.6
100	270.00	.10000+00	1308.0	.8020-01	.1022	.1187	.9245	.6038-02	.4083-02	.6860	5.072	552.8
99	270.00	.11500	1345.0	.5890-01	.7520-01	.8910-01	.9220	.4538-02	.3001-02	.5030	3.703	559.5
99	277.00	.13600	1346.0	.1950-01	.2420-01	.2790-01	.9220	.1424-02	.9923-03	.1860	1.380	540.0
99	277.00	.30000	1347.0	.2150-01	.2640-01	.3030-01	.9220	.1545-02	.1098-02	.2150	1.634	531.1
100	277.00	.40000	1464.0	.1880-01	.2340-01	.2700-01	.9220	.1375-02	.9590-03	.1780	1.329	535.1
100	277.00	.60000	1466.0	.2030-01	.2500-01	.2870-01	.9220	.1459-02	.1031-02	.1980	1.480	529.0
100	277.00	.70000	1467.0	.1930-01	.2400-01	.2780-01	.9220	.1414-02	.9808-03	.1800	1.340	537.4
99	277.00	.75000	1348.0	.2810-01	.3530-01	.4120-01	.9220	.2100-02	.1433-02	.2560	1.894	548.5
99	277.00	.81500	1349.0	.3730-01	.4660-01	.5420-01	.9220	.2763-02	.1900-02	.3450	2.561	545.4
99	277.00	.83700	1350.0	.3750-01	.4700-01	.5470-01	.9220	.2788-02	.1913-02	.3460	2.565	546.2
99	277.00	.88400	1351.0	.6230-01	.7860-01	.9210-01	.9220	.4694-02	.3173-02	.5560	4.109	551.9
99	277.00	.89400	1352.0	.4580-01	.5750-01	.6710-01	.9220	.3419-02	.2335-02	.4180	3.095	548.1
100	277.00	.90000	1468.0	.5270-01	.6610-01	.7700-01	.9220	.3920-02	.2683-02	.4780	3.553	542.6
100	277.00	.90700	1353.0	.5970-01	.7500-01	.8760-01	.9220	.4456-02	.3039-02	.5370	3.991	544.0
100	277.00	.92100	1469.0	.4800-01	.5990-01	.6960-01	.9220	.3540-02	.2442-02	.4430	3.294	539.6
100	277.00	.92800	1470.0	.6240-01	.7830-01	.9140-01	.9220	.4652-02	.3176-02	.5630	4.182	543.6

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR20)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
100	277.00	.93700	1471.0	.6330-01	.7960-01	.9310-01	.9220	.4737-02	.3221-02	.5660	4.199	545.2
99	277.00	.93900	1354.0	.6430-01	.8160-01	.9600-01	.9220	.4895-02	.3278-02	.5630	4.157	555.3
100	335.00	.11000	1309.0	.7740-01	.9850-01	.1141	.9250	.5805-02	.3940-02	.6630	4.904	552.5
99	337.50	.74000	1355.0	.6050-01	.7710-01	.9120-01	.9220	.4646-02	.3084-02	.5200	3.835	558.3
99	337.50	.75000	1356.0	.9990-01	.1287	.1535	.9220	.7822-02	.5091-02	.8270	6.178	564.6
100	337.50	.76500	1357.0	.4280-01	.5290-01	.6100-01	.9220	.3106-02	.2178-02	.4100	3.117	532.5
100	337.50	.92500	1359.0	.4930-01	.6230-01	.7310-01	.9220	.3721-02	.2509-02	.4330	3.207	548.3
100	337.50	.93200	1360.0	.6380-01	.8090-01	.9530-01	.9220	.4848-02	.3246-02	.5520	4.087	550.7
100	337.50	.93900	1361.0	.6990-01	.8860-01	.1042	.9220	.5304-02	.3556-02	.6070	4.491	550.2

RIGHT SRB

PARAMETRIC DATA

ALPHA = 5.000 BETA = -5.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
89	5.060	-5.100	4.020	72.80	746.0	176.3	.4670	5.278	2616.	.2220-03	.1420-06	4.090
90	5.050	-5.100	4.020	72.60	746.0	176.3	.4660	5.270	2616.	.2217-03	.1419-06	4.085

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
89	.5114-01	.1137-01
90	.5110-01	.1138-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
89	.00000	.25000-01	1311.0	.1548	.1958	.2227	.9273	.1139-01	.7915-02	1.408	10.16	568.3
89	.00000	.83700	1364.0	.5760-01	.7240-01	.8450-01	.9220	.4320-02	.2946-02	.5390	3.966	563.2
89	.00000	.88400	1365.0	.9680-01	.1228	.1445	.9220	.7391-02	.4950-02	.8720	6.394	570.0
89	.00000	.90700	1366.0	.9100-01	.1152	.1354	.9220	.6923-02	.4655-02	.8270	6.065	568.6
89	5.0000	.75000-01	1313.0	.8890-01	.1101	.1233	.9276	.6306-02	.4545-02	.8790	6.286	552.9
89	15.600	.95300	1431.0	.5630-01	.7100-01	.7970-01	.9291	.4073-02	.2877-02	.5180	3.804	566.2
89	20.000	.75000-01	1316.0	.9610-01	.1199	.1339	.9290	.6845-02	.4916-02	.9250	6.599	558.1
89	20.000	.10000+00	1318.0	.8140-01	.1016	.1134	.9290	.5800-02	.4164-02	.7830	5.772	558.2
89	20.000	.11000	1319.0	.8610-01	.1075	.1201	.9290	.6141-02	.4403-02	.8250	6.078	559.0
89	20.000	.95300	1432.0	.4790-01	.6010-01	.6710-01	.9296	.3429-02	.2447-02	.4490	3.305	562.7
90	22.500	.72400	1367.0	.8980-01	.1163	.1393	.9220	.7118-02	.4589-02	.7520	5.570	582.3
89	22.500	.74000	1368.0	.1198	.1570	.1901	.9220	.9721-02	.6127-02	.9640	7.004	588.8
89	22.500	.75000	1369.0	.2134	.2890	.3605	.9220	.1843-01	.1091-01	1.557	11.22	603.6
90	22.500	.76500	1370.0	.1143	.1449	.1705	.9220	.8710-02	.5842-02	1.033	7.700	569.4
90	22.500	.77100	1371.0	.7510-01	.9350-01	.1083	.9220	.5536-02	.3839-02	.7290	5.379	556.3
89	22.500	.92500	1372.0	.3480-01	.4360-01	.5080-01	.9220	.2599-02	.1780-02	.3290	2.420	561.6
89	22.500	.93900	1374.0	.5730-01	.7190-01	.8390-01	.9220	.4291-02	.2931-02	.5380	3.960	562.6
89	24.400	.95300	1433.0	.5800-01	.7310-01	.8160-01	.9300	.4172-02	.2968-02	.5370	3.945	565.3
89	35.000	.75000-01	1321.0	.9960-01	.1241	.1372	.9306	.7018-02	.5093-02	.9610	6.863	557.5
89	35.000	.11000	1322.0	.7640-01	.9520-01	.1052	.9306	.5378-02	.3908-02	.7400	5.553	556.9

IH72. OTS W/PROTUBERANCES. RIGHT SRB HI/HREF

(RVZR21)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
89	35.600	.95300	1434.0	.4850-01	.6100-01	.6750-01	.9314	.3450-02	.2478-02	.4500	3.311	564.4
89	40.000	.95300	1435.0	.4530-01	.5700-01	.6280-01	.9319	.3212-02	.2316-02	.4210	3.098	564.2
89	45.000	.74000	1375.0	.1149	.1494	.1796	.9220	.9185-02	.5878-02	.9500	7.032	584.6
89	45.000	.75000	1376.0	.1288	.1690	.2048	.9220	.1047-01	.6587-02	1.033	7.629	589.4
90	45.000	.76500	1377.0	.1142	.1457	.1723	.9220	.8805-02	.5835-02	1.007	7.366	573.6
90	45.000	.77100	1378.0	.8010-01	.1029	.1225	.9220	.6259-02	.4091-02	.6870	5.018	578.2
90	45.000	.81500	1379.0	.3850-01	.4830-01	.5640-01	.9220	.2881-02	.1965-02	.3600	2.646	563.1
90	45.000	.88400	1381.0	.2780-01	.3500-01	.4080-01	.9220	.2085-02	.1423-02	.2610	1.918	562.9
90	45.000	.90700	1382.0	.3070-01	.3840-01	.4470-01	.9220	.2286-02	.1567-02	.2900	2.135	561.1
89	65.000	.11000	1323.0	.1519	.1922	.2092	.9346	.1070-01	.7768-02	1.384	9.986	568.1
89	67.500	.74000	1383.0	.1153	.1502	.1806	.9223	.9237-02	.5894-02	.9450	6.987	585.9
89	67.500	.75000	1384.0	.1377	.1820	.2214	.9223	.1132-01	.7044-02	1.081	7.969	592.7
90	67.500	.77100	1385.0	.8510-01	.1075	.1258	.9223	.6428-02	.4348-02	.7790	5.719	567.0
89	76.000	.10000+00	1324.0	.1271	.1607	.1734	.9361	.8866-02	.6501-02	1.162	8.525	567.6
89	76.000	.14100	1386.0	.1399	.1773	.2078	.9225	.1063-01	.7155-02	1.267	9.293	569.1
89	76.000	.14800	1387.0	.7230-01	.8950-01	.1029	.9225	.5262-02	.3699-02	.7210	5.331	551.5
89	76.000	.15500	1388.0	.5260-01	.6470-01	.7400-01	.9225	.3783-02	.2691-02	.5400	4.004	545.7
89	76.000	.16200	1389.0	.4300-01	.5270-01	.6020-01	.9225	.3078-02	.2201-02	.4470	3.321	543.2
89	77.500	.95300	1436.0	.5330-01	.6660-01	.7110-01	.9371	.3638-02	.2725-02	.5090	3.750	559.5
89	77.500	.99400	1439.0	.5640-01	.7170-01	.7700-01	.9371	.3938-02	.2885-02	.5060	3.706	570.9
90	90.000	.15000-01	1325.0	.2648	.3475	.3759	.9379	.1921-01	.1353-01	2.121	15.66	589.4
89	90.000	.25000-01	1326.0	.2832	.3804	.4149	.9379	.2122-01	.1448-01	2.115	15.02	600.2
90	90.000	.40000-01	1327.0	.2212	.2866	.3087	.9379	.1577-01	.1130-01	1.850	13.47	582.5
89	90.000	.60000-01	1328.0	.1541	.1962	.2101	.9379	.1074-01	.7881-02	1.372	9.417	572.2
89	90.000	.75000-01	1329.0	.8120-01	.1014	.1079	.9379	.5518-02	.4154-02	.7790	5.300	558.7
90	90.000	.13230	1479.0	.3542	.7161	1.608	.9229	.8217-01	.1810-01	1.336	9.315	672.4
90	90.000	.13390	1480.0	.3734	.7300	1.515	.9229	.7743-01	.1908-01	1.457	10.17	669.8
90	90.000	.13560	1481.0	.2807	.4397	.6351	.9229	.3245-01	.1434-01	1.479	10.46	643.0
90	90.000	.13730	1482.0	.2556	.3493	.4361	.9229	.2228-01	.1306-01	1.817	13.08	607.1
90	90.000	.13890	1483.0	.1667	.2148	.2547	.9229	.1302-01	.8517-02	1.418	10.34	579.7
90	90.000	.55000	1391.0	.8130-01	.1023	.1191	.9229	.6084-02	.4154-02	.7540	5.538	564.7
90	90.000	.65000	1392.0	.5810-01	.7320-01	.8510-01	.9229	.4351-02	.2968-02	.5380	3.951	565.0
89	90.000	.74000	1393.0	.2480-01	.3100-01	.3580-01	.9229	.1830-02	.1270-02	.2390	1.794	557.9
89	90.000	.76500	1394.0	.1245	.1602	.1898	.9229	.9707-02	.6366-02	1.065	7.769	579.0
89	90.000	.77100	1395.0	.6520-01	.8290-01	.9730-01	.9229	.4976-02	.3334-02	.5810	4.258	571.8
89	90.000	.81500	1396.0	.1640-01	.2060-01	.2400-01	.9229	.1229-02	.8378-03	.1520	1.133	565.3
89	90.000	.83700	1397 0	.1820-01	.2290-01	.2660-01	.9229	.1358-02	.9311-03	.1700	1.254	563.2
89	90.000	.88400	1398.0	.4830-01	.6070-01	.7050-01	.9229	.3605-02	.2468-02	.4510	3.314	563.7
89	90.000	.89400	1399.0	.4250-01	.5290-01	.6110-01	.9229	.3123-02	.2171-02	.4100	3.025	557.4
89	90.000	.90700	1400.0	.4060-01	.5070-01	.5850-01	.9229	.2990-02	.2078-02	.3920	2.895	557.4
89	90.000	.91700	1401.0	.3170-01	.3940-01	.4540-01	.9229	.2321-02	.1620-02	.3090	2.278	555.7
89	90.000	.93200	1402.0	.4680-01	.5860-01	.6790-01	.9229	.3473-02	.2393-02	.4430	3.260	561.2
89	90.000	.93900	1403.0	.5370-01	.6740-01	.7820-01	.9229	.4000-02	.2746-02	.5040	3.710	562.6

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR21)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
90	95.000	.13560	1484.0	.2527	.3899	.5516	.9230	.2819-01	.1291-01	1.369	9.693	640.2
90	95.000	.13730	1485.0	.2174	.3194	.4278	.9230	.2186-01	.1111-01	1.298	9.240	629.3
90	95.000	.13890	1486.0	.2088	.2989	.3897	.9230	.1991-01	.1067-01	1.320	9.431	622.4
90	95.000	.14560	1487.0	.1549	.2036	.2452	.9230	.1253-01	.7913-02	1.234	8.952	590.3
90	95.000	.14730	1488.0	.1159	.1485	.1750	.9230	.8942-02	.5924-02	1.008	7.370	575.9
89	104.00	.10000+00	1330.0	.1807	.2330	.2484	.9393	.1270-01	.9240-02	1.535	11.20	580.1
89	104.00	.12000	1404.0	.2620	.3762	.4907	.9233	.2509-01	.1340-01	1.646	11.75	623.4
89	104.00	.12700	1405.0	.2558	.3582	.4558	.9233	.2331-01	.1308-01	1.707	12.24	615.7
89	104.00	.13400	1406.0	.2271	.3348	.4487	.9233	.2294-01	.1161-01	1.347	9.582	630.3
89	104.00	.14100	1407.0	.2192	.3201	.4246	.9233	.2171-01	.1121-01	1.327	9.457	627.8
89	104.00	.14800	1408.0	.1211	.1555	.1834	.9233	.9376-02	.6192-02	1.044	7.626	577.6
89	104.00	.15500	1409.0	.1237	.1614	.1928	.9233	.9858-02	.6326-02	1.011	7.351	586.4
89	104.00	.16200	1410.0	.1137	.1475	.1753	.9233	.8967-02	.5815-02	.9470	6.898	583.3
89	104.00	.17300	1411.0	.7790-01	.9790-01	.1135	.9233	.5801-02	.3985-02	.7290	5.358	563.4
89	104.00	.18000	1412.0	.6120-01	.7620-01	.8780-01	.9233	.4488-02	.3129-02	.5920	4.365	557.1
89	104.00	.18600	1413.0	.5070-01	.6300-01	.7230-01	.9233	.3699-02	.2594-02	.4970	3.674	554.5
89	104.00	.19300	1414.0	.4240-01	.5250-01	.6010-01	.9233	.3076-02	.2166-02	.4200	3.103	552.5
89	104.00	.20000	1415.0	.4050-01	.5020-01	.5760-01	.9233	.2945-02	.2071-02	.4000	2.955	553.2
89	104.00	.25000	1416.0	.3370-01	.4180-01	.4790-01	.9233	.2451-02	.1725-02	.3340	2.507	552.9
90	112.00	.13560	1489.0	.1331	.1712	.2018	.9234	.1031-01	.6802-02	1.141	8.330	578.4
90	112.00	.13730	1490.0	.1345	.1755	.2094	.9234	.1070-01	.6874-02	1.098	7.984	586.4
90	112.00	.13890	1491.0	.1459	.1905	.2275	.9234	.1162-01	.7453-02	1.187	8.625	587.0
90	112.00	.14560	1492.0	.1445	.1854	.2182	.9234	.1115-01	.7386-02	1.250	9.135	576.9
90	112.00	.14730	1493.0	.1429	.1884	.2267	.9234	.1158-01	.7304-02	1.129	8.191	591.5
89	112.50	.74000	1417.0	.1441	.1975	.2460	.9235	.1258-01	.7367-02	1.016	7.306	608.4
89	112.50	.75000	1418.0	.1551	.2220	.2879	.9235	.1472-01	.7931-02	.9820	7.017	622.4
90	112.50	.77100	1419.0	.9850-01	.1300	.1565	.9235	.7998-02	.5034-02	.7760	5.721	592.0
89	112.50	.92500	1420.0	.3930-01	.4900-01	.5640-01	.9235	.2885-02	.2011-02	.3790	2.796	557.7
89	112.50	.93200	1421.0	.5470-01	.6890-01	.8000-01	.9235	.4088-02	.2795-02	.5050	3.713	565.5
89	112.50	.93900	1422.0	.6410-01	.8110-01	.9440-01	.9235	.4829-02	.3277-02	.5830	4.274	568.4
89	112.50	.95300	1440.0	.8700-01	.1107	.1164	.9409	.5954-02	.4449-02	.7760	5.686	571.7
90	112.50	.96700	1441.0	.9830-01	.1273	.1345	.9409	.6874-02	.5022-02	.8220	5.991	582.4
90	112.50	.99400	1443.0	.4030-01	.5240-01	.5550-01	.9409	.2835-02	.2057-02	.3300	2.404	585.5
90	135.00	.80000-02	1331.0	.3389	.4723	.5095	.9407	.2603-01	.1732-01	2.288	17.28	614.0
89	135.00	.25000-01	1332.0	.3166	.4366	.4696	.9407	.2401-01	.1619-01	2.198	15.79	610.5
90	135.00	.50000-01	1333.0	.2306	.3041	.3232	.9407	.1651-01	.1178-01	1.820	13.20	591.7
89	135.00	.75000-01	1334.0	.1240	.1586	.1673	.9407	.8554-02	.6343-02	1.086	8.072	575.1
89	135.00	.10000+00	1335.0	.1310	.1683	.1777	.9407	.9088-02	.6700-02	1.128	8.236	577.9
89	135.00	.40000	1423.0	.7290-01	.9330-01	.1093	.9237	.5590-02	.3728-02	.6370	4.739	575.3
90	135.00	.92500	1424.0	.4200-01	.5500-01	.6560-01	.9237	.3352-02	.2147-02	.3400	2.471	587.8
90	140.00	.13560	1494.0	.9570-01	.1222	.1432	.9237	.7317-02	.4888-02	.8390	6.134	574.6
90	140.00	.13730	1495.0	.8870-01	.1137	.1335	.9237	.6820-02	.4531-02	.7690	5.617	576.5
90	140.00	.13890	1496.0	.7750-01	.9960-01	.1172	.9237	.5968-02	.3958-02	.6650	4.855	578.2

IH72. OTS W/PROTUBERANCES. RIGHT SRB HI/HREF (RVZR21)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
90	140.00	.14560	1497.0	.6850-01	.8680-01	.1010	.9237	.5163-02	.3502-02	.6200	4.544	569.2
90	150.00	.14230	1499.0	.7210-01	.9150-01	.1067	.9236	.5451-02	.3685-02	.6490	4.757	570.1
90	180.00	.80000-02	1298.0	.3335	.4671	.5177	.9378	.2645-01	.1704-01	2.224	16.78	615.7
90	180.00	.15000-01	1299.0	.2560	.3373	.3656	.9378	.1868-01	.1308-01	2.026	14.45	591.3
89	180.00	.25000-01	1300.0	.3270	.4397	.4802	.9378	.2455-01	.1672-01	2.433	16.72	600.7
90	180.00	.50000-01	1301.0	.2292	.2997	.3241	.9378	.1656-01	.1171-01	1.855	12.84	587.7
89	180.00	.75000-01	1302.0	.1501	.1922	.2063	.9378	.1055-01	.7678-02	1.308	8.966	575.8
90	180.00	.10000+00	1303.0	.1801	.2363	.2557	.9378	.1307-01	.9205-02	1.446	10.50	589.1
89	225.00	.98000	1425.0	.9080-01	.1189	.1333	.9325	.6815-02	.4644-02	.7350	5.336	588.1
89	225.00	.99400	1426.0	.7760-01	.1013	.1134	.9325	.5799-02	.3967-02	.6330	4.600	586.7
89	263.00	.13600	1336.0	.2630-01	.3220-01	.3670-01	.9220	.1879-02	.1344-02	.2750	2.046	541.6
90	263.00	.20000	1472.0	.2690-01	.3280-01	.3730-01	.9220	.1905-02	.1376-02	.2880	2.150	536.5
90	263.00	.30000	1337.0	.3030-01	.3690-01	.4190-01	.9220	.2142-02	.1550-02	.3270	2.478	535.4
90	263.00	.40000	1473.0	.1940-01	.2380-01	.2720-01	.9220	.1392-02	.9923-03	.2010	1.493	543.6
90	263.00	.50000	1474.0	.2030-01	.2480-01	.2840-01	.9220	.1452-02	.1035-02	.2100	1.561	543.2
90	263.00	.60000	1475.0	.3230-01	.3960-01	.4540-01	.9220	.2318-02	.1652-02	.3350	2.485	543.6
90	263.00	.75000	1338.0	.5150-01	.6410-01	.7430-01	.9220	.3794-02	.2631-02	.4990	3.686	556.3
90	263.00	.81500	1339.0	.3080-01	.3800-01	.4370-01	.9220	.2231-02	.1574-02	.3110	2.305	548.5
90	263.00	.83700	1340.0	.2600-01	.3200-01	.3680-01	.9220	.1881-02	.1328-02	.2630	1.950	548.1
90	263.00	.88400	1341.0	.3890-01	.4830-01	.5590-01	.9220	.2857-02	.1988-02	.3800	2.809	554.8
90	263.00	.89400	1342.0	.4850-01	.6000-01	.6930-01	.9220	.3539-02	.2476-02	.4800	3.546	552.5
90	263.00	.92800	1477.0	.5120-01	.6390-01	.7410-01	.9220	.3788-02	.2616-02	.4920	3.630	558.0
89	263.00	.93900	1344.0	.5700-01	.7160-01	.8350-01	.9220	.4272-02	.2917-02	.5350	3.938	562.7
90	270.00	.80000-02	1304.0	.1838	.2338	.2668	.9272	.1363-01	.9394-02	1.641	12.88	571.5
89	270.00	.75000-01	1307.0	.8920-01	.1109	.1247	.9272	.6375-02	.4559-02	.8690	6.113	555.6
90	270.00	.10000+00	1308.0	.1037	.1306	.1482	.9272	.7571-02	.5297-02	.9580	7.038	565.3
89	270.00	.11500	1345.0	.7340-01	.9260-01	.1084	.9220	.5545-02	.3756-02	.6780	4.977	565.8
89	277.00	.13600	1346.0	.2590-01	.3180-01	.3630-01	.9220	.1858-02	.1326-02	.2700	2.003	542.9
89	277.00	.30000	1347.0	.3200-01	.3890-01	.4420-01	.9220	.2260-02	.1636-02	.3450	2.616	535.4
90	277.00	.40000	1464.0	.2140-01	.2620-01	.3000-01	.9220	.1534-02	.1092-02	.2210	1.640	544.0
90	277.00	.60000	1466.0	.2670-01	.3270-01	.3740-01	.9220	.1910-02	.1366-02	.2790	2.075	541.8
90	277.00	.70000	1467.0	.2690-01	.3310-01	.3810-01	.9220	.1948-02	.1373-02	.2710	2.004	549.1
89	277.00	.75000	1348.0	.4160-01	.5170-01	.5980-01	.9220	.3059-02	.2126-02	.4050	2.994	555.5
89	277.00	.81500	1349.0	.2690-01	.3340-01	.3870-01	.9220	.1978-02	.1378-02	.2640	1.953	554.4
89	277.00	.83700	1350.0	.2480-01	.3080-01	.3560-01	.9220	.1822-02	.1269-02	.2430	1.797	554.5
89	277.00	.88400	1351.0	.5610-01	.7040-01	.8200-01	.9220	.4194-02	.2871-02	.5300	3.898	561.7
89	277.00	.89400	1352.0	.5740-01	.7160-01	.8310-01	.9220	.4249-02	.2937-02	.5540	4.083	557.8
90	277.00	.90000	1468.0	.6520-01	.8160-01	.9490-01	.9220	.4851-02	.3331-02	.6190	4.558	560.4
90	277.00	.90700	1353.0	.6670-01	.8370-01	.9760-01	.9220	.4987-02	.3410-02	.6280	4.619	562.1
90	277.00	.92100	1469.0	.5630-01	.7010-01	.8120-01	.9220	.4150-02	.2879-02	.5470	4.039	556.1
90	277.00	.92800	1470.0	.7330-01	.9190-01	.1071	.9220	.5471-02	.3747-02	.6920	5.093	561.5
90	277.00	.93700	1471.0	.7650-01	.9620-01	.1124	.9220	.5741-02	.3910-02	.7130	5.245	563.7
89	277.00	.93900	1354.0	.8090-01	.1025	.1205	.9220	.6161-02	.4136-02	.7330	5.372	569.1

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, RIGHT SRB

(RVZR21)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HI/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
90	335.00	.11000	1309.0	.9410-01	.1182	.1347	.9261	.6882-02	.4806-02	.8790	6.466	563.2
89	337.50	.74000	1355.0	.7910-01	.1029	.1237	.9220	.6326-02	.4047-02	.6540	4.759	584.6
89	337.50	.75000	1356.0	.9610-01	.1273	.1557	.9220	.7961-02	.4912-02	.7460	5.498	594.3
90	337.50	.76500	1357.0	.8810-01	.1096	.1269	.9220	.6484-02	.4503-02	.8580	6.442	555.6
90	337.50	.92500	1359.0	.5710-01	.7190-01	.8410-01	.9220	.4300-02	.2919-02	.5290	3.887	565.0
90	337.50	.93200	1360.0	.7090-01	.8960-01	.1051	.9220	.5371-02	.3624-02	.6480	4.758	567.3
90	337.50	.93900	1361.0	.1030	.1306	.1536	.9220	.7850-02	.5261-02	.9280	6.804	569.7

RIGHT SRB

PARAMETRIC DATA

ALPHA = 5.000 BETA = .0000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
85	5.080	.0000	4.020	72.80	747.0	176.5	.4670	5.282	2617.	.2219-03	.1421-06	4.087
86	5.100	.0000	4.020	72.80	747.0	176.5	.4670	5.280	2617.	.2219-03	.1421-06	4.087

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
85	.5116-01	.1138-01
86	.5115-01	.1138-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
85	.00000	.25000-01	1311.0	.1899	.2400	.2726	.9273	.1395-01	.9718-02	1.741	12.56	567.9
85	.00000	.76500	1362.0	.7790-01	.9870-01	.1161	.9220	.5941-02	.3986-02	.7060	5.262	569.9
85	.00000	.83700	1364.0	.5450-01	.6870-01	.8050-01	.9220	.4118-02	.2790-02	.5040	3.701	566.4
85	.00000	.88400	1365.0	.1229	.1580	.1881	.9220	.9626-02	.6290-02	1.058	7.717	578.9
85	.00000	.90700	1366.0	.1212	.1560	.1859	.9220	.9512-02	.6202-02	1.038	7.576	579.6
85	5.0000	.75000-01	1313.0	.1091	.1364	.1539	.9273	.7877-02	.5580-02	1.039	7.407	560.8
85	20.000	.75000-01	1316.0	.1172	.1472	.1664	.9275	.8513-02	.5994-02	1.097	7.801	564.1
85	20.000	.10000+00	1318.0	.1163	.1462	.1652	.9275	.8455-02	.5950-02	1.088	7.995	564.3
85	20.000	.11000	1319.0	.1132	.1418	.1599	.9275	.8179-02	.5794-02	1.076	7.918	561.4
85	20.000	.95300	1432.0	.9700-01	.1245	.1421	.9281	.7272-02	.4964-02	.8400	6.136	577.7
86	22.500	.72400	1367.0	.4750-01	.6050-01	.7150-01	.9220	.3657-02	.2429-02	.4220	3.137	573.4
85	22.500	.74000	1368.0	.1237	.1596	.1905	.9220	.9749-02	.6329-02	1.051	7.665	580.9
85	22.500	.75000	1369.0	.1393	.1852	.2271	.9220	.1162-01	.7127-02	1.074	7.771	596.3
86	22.500	.76500	1370.0	.8230-01	.1043	.1227	.9220	.6274-02	.4208-02	.7440	5.548	570.0
86	22.500	.77100	1371.0	.6050-01	.7590-01	.8860-01	.9220	.4530-02	.3096-02	.5700	4.191	562.9
85	22.500	.92500	1372.0	.4300-01	.5400-01	.6300-01	.9220	.3222-02	.2199-02	.4030	2.966	563.6
85	22.500	.93900	1374.0	.8110-01	.1029	.1211	.9220	.6195-02	.4147-02	.7310	5.355	570.8
85	24.400	.95300	1433.0	.9810-01	.1265	.1447	.9282	.7401-02	.5020-02	.8370	6.103	580.3
85	35.000	.75000-01	1321.0	.1217	.1526	.1717	.9280	.8786-02	.6225-02	1.148	8.173	562.6
85	35.000	.11000	1322.0	.1002	.1248	.1399	.9280	.7158-02	.5126-02	.9710	7.284	557.8

1H72. OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
85	35.600	.95300	1434.0	.6750-01	.8610-01	.9760-01	.9286	.4991-02	.3454-02	.5980	4.375	573.9
85	40.000	.95300	1435.0	.5030-01	.6390-01	.7210-01	.9288	.3691-02	.2572-02	.4510	3.302	571.7
85	45.000	.74000	1375.0	.1208	.1555	.1853	.9220	.9479-02	.6178-02	1.034	7.670	579.7
85	45.000	.75000	1376.0	.1602	.2088	.2514	.9220	.1286-01	.8198-02	1.317	9.736	586.4
86	45.000	.76500	1377.0	.1232	.1579	.1874	.9220	.9586-02	.6302-02	1.072	7.829	576.8
86	45.000	.77100	1378.0	.1109	.1449	.1751	.9220	.8956-02	.5671-02	.9010	6.545	588.0
86	45.000	.81500	1379.0	.5000-01	.6360-01	.7500-01	.9220	.3834-02	.2558-02	.4480	3.280	571.8
86	45.000	.88400	1381.0	.2650-01	.3370-01	.3970-01	.9220	.2029-02	.1355-02	.2380	1.741	571.5
86	45.000	.90700	1382.0	.3200-01	.4040-01	.4730-01	.9220	.2419-02	.1636-02	.2940	2.161	567.0
85	65.000	.11000	1323.0	.1793	.2279	.2560	.9298	.1310-01	.9172-02	1.605	11.56	572.0
85	67.500	.74000	1383.0	.1219	.1562	.1853	.9220	.9483-02	.6238-02	1.062	7.891	576.8
85	67.500	.75000	1384.0	.1361	.1762	.2110	.9220	.1080-01	.6963-02	1.142	8.460	583.0
86	67.500	.77100	1385.0	.1008	.1272	.1490	.9220	.7622-02	.5157-02	.9290	6.819	566.8
85	76.000	.10000+00	1324.0	.1359	.1716	.1911	.9307	.9775-02	.6951-02	1.246	9.145	567.8
85	76.000	.14100	1386.0	.1338	.1716	.2037	.9220	.1042-01	.6848-02	1.163	8.496	577.2
85	76.000	.14800	1387.0	.8480-01	.1054	.1219	.9220	.6236-02	.4341-02	.8320	6.147	555.3
85	76.000	.15500	1388.0	.6480-01	.7960-01	.9130-01	.9220	.4669-02	.3315-02	.6660	4.943	546.1
85	76.000	.16200	1389.0	.4940-01	.6050-01	.6920-01	.9220	.3540-02	.2530-02	.5160	3.837	542.9
85	77.500	.95300	1436.0	.4150-01	.5210-01	.5750-01	.9315	.2944-02	.2125-02	.3910	2.877	563.0
85	77.500	.99400	1439.0	.4270-01	.5450-01	.6080-01	.9315	.3110-02	.2183-02	.3750	2.740	575.3
86	90.000	.15000-01	1325.0	.2838	.3675	.4114	.9319	.2104-01	.1452-01	2.380	17.63	582.9
85	90.000	.25000-01	1326.0	.3460	.4612	.5242	.9319	.2682-01	.1770-01	2.649	18.84	597.4
86	90.000	.40000-01	1327.0	.2472	.3193	.3569	.9319	.1826-01	.1265-01	2.093	15.25	581.4
85	90.000	.60000-01	1328.0	.1858	.2359	.2614	.9319	.1337-01	.9508-02	1.673	11.49	571.1
85	90.000	.75000-01	1329.0	.1059	.1330	.1465	.9319	.7497-02	.5417-02	.9930	6.741	563.7
86	90.000	.13230	1479.0	.3769	.7120	1.418	.9220	.7252-01	.1928-01	1.530	10.70	667.5
86	90.000	.13390	1480.0	.4305	.8401	1.798	.9220	.9197-01	.2202-01	1.687	11.77	670.3
86	90.000	.13560	1481.0	.3433	.5745	.9223	.9220	.4718-01	.1756-01	1.630	11.46	654.1
86	90.000	.13730	1482.0	.2499	.3610	.4805	.9220	.2458-01	.1278-01	1.552	11.07	625.5
86	90.000	.13890	1483.0	.1336	.1768	.2159	.9220	.1104-01	.6834-02	1.044	7.563	594.1
86	90.000	.55000	1391.0	.7550-01	.9580-01	.1128	.9220	.5771-02	.3864-02	.6810	4.992	570.6
86	90.000	.65000	1392.0	.6020-01	.7700-01	.9120-01	.9220	.4663-02	.3082-02	.5290	3.871	575.1
85	90.000	.74000	1393.0	.2120-01	.2650-01	.3070-01	.9220	.1572-02	.1086-02	.2050	1.535	558.5
85	90.000	.76500	1394.0	.1400	.1793	.2127	.9220	.1088-01	.7165-02	1.222	8.928	576.5
85	90.000	.77100	1395.0	.6710-01	.8530-01	.1006	.9220	.5148-02	.3435-02	.6010	4.404	572.0
85	90.000	.81500	1396.0	.2330-01	.2930-01	.3420-01	.9220	.1750-02	.1193-02	.2180	1.630	564.2
85	90.000	.83700	1397.0	.3510-01	.4420-01	.5160-01	.9220	.2640-02	.1797-02	.3280	2.411	564.5
85	90.000	.88400	1398.0	.4080-01	.5130-01	.6000-01	.9220	.3068-02	.2090-02	.3820	2.806	564.3
85	90.000	.89400	1399.0	.4610-01	.5730-01	.6650-01	.9220	.3401-02	.2357-02	.4470	3.301	557.2
85	90.000	.90700	1400.0	.3860-01	.4820-01	.5590-01	.9220	.2860-02	.1976-02	.3730	2.748	558.4
85	90.000	.91700	1401.0	.4020-01	.5000-01	.5780-01	.9220	.2958-02	.2059-02	.3950	2.916	555.3
85	90.000	.93200	1402.0	.3920-01	.4900-01	.5700-01	.9220	.2915-02	.2006-02	.3750	2.762	560.2
85	90.000	.93900	1403.0	.4910-01	.6140-01	.7140-01	.9220	.3651-02	.2514-02	.4700	3.463	560.0

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR22)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
86	95.000	.13560	1484.0	.3148	.4913	.7158	.9220	.3662-01	.1611-01	1.675	11.85	642.9
86	95.000	.13730	1485.0	.2524	.3744	.5132	.9220	.2625-01	.1291-01	1.480	10.52	632.3
86	95.000	.13890	1486.0	.1770	.2579	.3465	.9220	.1773-01	.9052-02	1.078	7.678	627.8
86	95.000	.14560	1487.0	.1620	.2130	.2587	.9220	.1323-01	.8287-02	1.292	9.370	591.0
86	95.000	.14730	1488.0	.1273	.1624	.1921	.9220	.9824-02	.6513-02	1.126	8.233	574.1
85	104.00	.10000+00	1330.0	.1899	.2431	.2682	.9333	.1372-01	.9714-02	1.658	12.11	576.4
85	104.00	.12000	1404.0	.3240	.4646	.6134	.9221	.3138-01	.1658-01	2.046	14.60	623.6
85	104.00	.12700	1405.0	.2958	.4087	.5194	.9221	.2658-01	.1513-01	2.047	14.70	611.8
85	104.00	.13400	1406.0	.2932	.4381	.6053	.9221	.3097-01	.1500-01	1.695	12.04	634.1
85	104.00	.14100	1407.0	.2444	.3620	.4952	.9221	.2534-01	.1250-01	1.437	10.22	632.1
85	104.00	.14800	1408.0	.1209	.1551	.1842	.9221	.9423-02	.6184-02	1.047	7.649	577.6
85	104.00	.15500	1409.0	.1202	.1561	.1874	.9221	.9589-02	.6151-02	.9990	7.268	584.6
85	104.00	.16200	1410.0	.1087	.1408	.1687	.9221	.8630-02	.5560-02	.9100	6.626	583.4
85	104.00	.17300	1411.0	.8190-01	.1027	.1108	.9221	.6129-02	.4188-02	.7700	5.664	563.2
85	104.00	.18000	1412.0	.6590-01	.8180-01	.9470-01	.9221	.4844-02	.3369-02	.6450	4.758	555.8
85	104.00	.18600	1413.0	.5720-01	.7070-01	.8150-01	.9221	.4169-02	.2927-02	.5720	4.231	551.6
85	104.00	.19300	1414.0	.4540-01	.5600-01	.6430-01	.9221	.3292-02	.2325-02	.4610	3.413	548.8
85	104.00	.20000	1415.0	.4310-01	.5310-01	.6110-01	.9221	.3124-02	.2205-02	.4360	3.231	549.2
85	104.00	.25000	1416.0	.3780-01	.4660-01	.5340-01	.9221	.2734-02	.1937-02	.3860	2.913	547.5
86	112.00	.13560	1489.0	.1578	.2041	.2440	.9221	.1248-01	.8069-02	1.328	9.673	582.3
86	112.00	.13730	1490.0	.1754	.2313	.2811	.9221	.1438-01	.8974-02	1.388	10.06	592.2
86	112.00	.13890	1491.0	.1854	.2443	.2968	.9221	.1518-01	.9485-02	1.470	10.66	591.9
86	112.00	.14560	1492.0	.1708	.2196	.2612	.9221	.1336-01	.8739-02	1.469	10.72	578.8
86	112.00	.14730	1493.0	.1688	.2227	.2709	.9221	.1386-01	.8636-02	1.333	9.664	592.5
85	112.50	.74000	1417.0	.1147	.1640	.2157	.9221	.1104-01	.5869-02	.7290	5.208	622.8
85	112.50	.75000	1418.0	.1184	.1829	.2624	.9221	.1343-01	.6060-02	.6430	4.549	641.0
86	112.50	.77100	1419.0	.6820-01	.9260-01	.1158	.9221	.5924-02	.3486-02	.4930	3.609	605.6
85	112.50	.92500	1420.0	.4000-01	.4970-01	.5750-01	.9221	.2944-02	.2045-02	.3900	2.876	556.5
85	112.50	.93200	1421.0	.4080-01	.5120-01	.5950-01	.9221	.3046-02	.2090-02	.3870	2.850	561.7
85	112.50	.93900	1422.0	.5260-01	.6580-01	.7650-01	.9221	.3912-02	.2691-02	.5020	3.693	560.7
85	112.50	.95300	1440.0	.6080-01	.7600-01	.8220-01	.9348	.4206-02	.3109-02	.5800	4.272	560.5
86	112.50	.96700	1441.0	.7290-01	.9290-01	.1013	.9349	.5182-02	.3732-02	.6490	4.749	573.0
86	112.50	.99400	1443.0	.4830-01	.6260-01	.6880-01	.9349	.3519-02	.2473-02	.4050	2.946	583.3
86	135.00	.80000-02	1331.0	.3793	.5169	.5750	.9361	.2941-01	.1940-01	2.723	20.63	606.6
85	135.00	.25000-01	1332.0	.3539	.4825	.5369	.9360	.2747-01	.1811-01	2.539	18.27	606.8
86	135.00	.50000-01	1333.0	.2640	.3462	.3790	.9361	.1939-01	.1351-01	2.125	15.43	589.5
85	135.00	.75000-01	1334.0	.1419	.1814	.1967	.9360	.1007-01	.7262-02	1.246	9.260	575.5
85	135.00	.10000+00	1335.0	.1488	.1905	.2067	.9360	.1058-01	.7614-02	1.298	9.487	576.5
85	135.00	.40000	1423.0	.6610-01	.8340-01	.9750-01	.9224	.4987-02	.3385-02	.6100	4.556	566.7
86	135.00	.92500	1424.0	.5240-01	.6720-01	.7960-01	.9224	.4071-02	.2682-02	.4550	3.326	577.1
86	140.00	.13560	1494.0	.9230-01	.1167	.1365	.9225	.6984-02	.4722-02	.8440	6.190	568.2
86	140.00	.13730	1495.0	.9270-01	.1176	.1379	.9225	.7056-02	.4743-02	.8380	6.140	570.3
86	140.00	.13890	1496.0	.9870-01	.1255	.1475	.9225	.7543-02	.5048-02	.8830	6.468	571.9

IH72. OTS W/PROTUBERANCES. RIGHT SRB

(RVZR22)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HI/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
86	140.00	.14560	1497.0	.8940-01	.1125	.1313	.9225	.6714-02	.4572-02	.8290	6.091	565.5
86	150.00	.14230	1499.0	.8670-01	.1090	.1268	.9227	.6486-02	.4436-02	.8110	5.963	564.1
86	180.00	.80000-02	1298.0	.3843	.5290	.5817	.9380	.2976-01	.1966-01	2.685	20.31	610.3
85	180.00	.15000-01	1299.0	.2688	.3522	.3806	.9380	.1947-01	.1375-01	2.169	15.49	589.2
86	180.00	.25000-01	1300.0	.3958	.5268	.5725	.9379	.2929-01	.2025-01	3.042	20.95	596.8
85	180.00	.50000-01	1301.0	.2734	.3571	.3854	.9380	.1972-01	.1399-01	2.229	15.43	587.5
86	180.00	.75000-01	1302.0	.1809	.2324	.2496	.9379	.1277-01	.9255-02	1.559	10.67	578.6
85	180.00	.10000+00	1303.0	.2130	.2789	.3014	.9380	.1542-01	.1090-01	1.723	12.51	588.8
85	225.00	.98000	1425.0	.8590-01	.1179	.1307	.9368	.6685-02	.4395-02	.6050	4.351	609.3
85	225.00	.99400	1426.0	.4070-01	.5580-01	.6190-01	.9368	.3167-02	.2082-02	.2870	2.061	609.3
85	263.00	.13600	1336.0	.3810-01	.4660-01	.5340-01	.9220	.2730-02	.1948-02	.3960	2.942	543.7
86	263.00	.20000	1472.0	.3900-01	.4760-01	.5440-01	.9220	.2781-02	.1996-02	.4120	3.062	540.6
86	263.00	.30000	1337.0	.3960-01	.4820-01	.5500-01	.9220	.2812-02	.2025-02	.4210	3.190	538.8
86	263.00	.40000	1473.0	.3440-01	.4240-01	.4860-01	.9220	.2488-02	.1761-02	.3510	2.602	547.6
86	263.00	.50000	1474.0	.2510-01	.3070-01	.3510-01	.9220	.1798-02	.1283-02	.2610	1.941	543.3
86	263.00	.60000	1475.0	.3760-01	.4620-01	.5300-01	.9220	.2712-02	.1925-02	.3870	2.870	546.0
86	263.00	.75000	1338.0	.5630-01	.7060-01	.8220-01	.9220	.4204-02	.2882-02	.5340	3.929	561.7
86	263.00	.81500	1339.0	.4100-01	.5080-01	.5850-01	.9220	.2994-02	.2099-02	.4090	3.026	552.0
86	263.00	.83700	1340.0	.3630-01	.4490-01	.5180-01	.9220	.2648-02	.1857-02	.3620	2.678	551.9
86	263.00	.88400	1341.0	.6160-01	.7720-01	.9000-01	.9220	.4602-02	.3151-02	.5820	4.285	562.1
86	263.00	.89400	1342.0	.5260-01	.6550-01	.7580-01	.9220	.3878-02	.2693-02	.5130	3.786	556.4
86	263.00	.92800	1477.0	.5810-01	.7320-01	.8570-01	.9220	.4383-02	.2975-02	.5390	3.961	565.6
85	263.00	.93900	1344.0	.7840-01	.9910-01	.1162	.9220	.5947-02	.4013-02	.7190	5.276	567.9
86	270.00	.80000-02	1304.0	.2166	.2751	.3048	.9319	.1559-01	.1108-01	1.948	15.29	571.1
86	270.00	.50000-01	1306.0	.1805	.2279	.2519	.9319	.1288-01	.9235-02	1.659	11.60	567.3
85	270.00	.75000-01	1307.0	.1273	.1599	.1762	.9319	.9013-02	.6513-02	1.195	8.368	563.6
86	270.00	.10000+00	1308.0	.1452	.1841	.2038	.9319	.1043-01	.7426-02	1.313	9.620	570.1
85	270.00	.11500	1345.0	.1044	.1328	.1567	.9220	.8017-02	.5344-02	.9340	6.838	572.3
85	277.00	.13600	1346.0	.3670-01	.4500-01	.5150-01	.9220	.2634-02	.1878-02	.3820	2.833	543.9
85	277.00	.30000	1347.0	.4250-01	.5140-01	.5830-01	.9220	.2984-02	.2173-02	.4660	3.541	532.5
86	277.00	.40000	1464.0	.3260-01	.4000-01	.4580-01	.9220	.2342-02	.1669-02	.3390	2.514	544.1
86	277.00	.60000	1466.0	.3060-01	.3750-01	.4280-01	.9220	.2188-02	.1567-02	.3220	2.392	541.6
86	277.00	.70000	1467.0	.3460-01	.4290-01	.4960-01	.9220	.2535-02	.1772-02	.3430	2.534	553.4
85	277.00	.75000	1348.0	.6020-01	.7470-01	.8640-01	.9220	.4422-02	.3078-02	.5900	4.360	555.2
85	277.00	.81500	1349.0	.5370-01	.6640-01	.7660-01	.9220	.3919-02	.2749-02	.5370	3.971	551.8
85	277.00	.83700	1350.0	.4860-01	.6010-01	.6940-01	.9220	.3548-02	.2487-02	.4850	3.585	552.2
85	277.00	.88400	1351.0	.6080-01	.7550-01	.8740-01	.9220	.4473-02	.3110-02	.5950	4.392	555.8
85	277.00	.89400	1352.0	.4610-01	.5750-01	.6670-01	.9220	.3413-02	.2361-02	.4460	3.290	558.0
86	277.00	.90000	1468.0	.3820-01	.4830-01	.5660-01	.9220	.2893-02	.1956-02	.3520	2.585	566.9
86	277.00	.90700	1353.0	.5070-01	.6390-01	.7490-01	.9220	.3831-02	.2594-02	.4680	3.437	566.5
86	277.00	.92100	1469.0	.5720-01	.7160-01	.8340-01	.9220	.4268-02	.2927-02	.5430	3.995	561.5
86	277.00	.92800	1470.0	.5640-01	.7120-01	.8350-01	.9220	.4269-02	.2885-02	.5180	3.805	567.2
86	277.00	.93700	1471.0	.6460-01	.8170-01	.9590-01	.9220	.4905-02	.3303-02	.5890	4.322	568.5

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR22)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
85	277.00	.93900	1354.0	.7570-01	.9550-01	.1118	.9220	.5722-02	.3875-02	.7000	5.139	566.5
86	335.00	.11000	1309.0	.1240	.1556	.1757	.9276	.8987-02	.6341-02	1.164	8.562	563.3
85	337.50	.74000	1355.0	.8160-01	.1037	.1223	.9220	.6256-02	.4176-02	.7320	5.361	571.8
85	337.50	.75000	1356.0	.7590-01	.9800-01	.1171	.9220	.5992-02	.3881-02	.6420	4.758	581.6
86	337.50	.76500	1357.0	.5210-01	.6490-01	.7540-01	.9220	.3857-02	.2663-02	.5010	3.757	558.7
86	337.50	.92500	1359.0	.5860-01	.7540-01	.8990-01	.9220	.4601-02	.2997-02	.5010	3.654	579.8
86	337.50	.93200	1360.0	.8110-01	.1055	.1269	.9220	.6490-02	.4150-02	.6710	4.879	585.3
86	337.50	.93900	1361.0	.1127	.1484	.1805	.9220	.9233-02	.5764-02	.8940	6.481	591.8

PARAMETRIC DATA

ALPHA = 5.000 BETA = 5.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
87	5.080	5.000	4.020	72.80	747.0	176.4	.4670	5.282	2616.	.2221-03	.1420-06	4.091
88	5.100	5.100	4.020	72.80	746.0	176.4	.4670	5.278	2616.	.2219-03	.1420-06	4.088

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
87	.5116-01	.1137-01
88	.5114-01	.1138-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
87	.00000	.25000-01	1311.0	.2473	.3210	.3712	.9272	.1899-01	.1265-01	2.059	14.74	583.8
87	.00000	.76500	1362.0	.1000+00	.1267	.1490	.9220	.7624-02	.5117-02	.9060	6.757	569.5
87	.00000	.83700	1364.0	.4310-01	.5440-01	.6360-01	.9220	.3256-02	.2207-02	.3990	2.933	565.7
87	.00000	.88400	1365.0	.7190-01	.9230-01	.1098	.9220	.5619-02	.3678-02	.6200	4.527	578.0
87	.00000	.90700	1366.0	.5750-01	.7380-01	.8780-01	.9220	.4490-02	.2943-02	.4980	3.635	577.5
87	5.0000	.75000-01	1313.0	.1357	.1716	.1954	.9269	.9997-02	.6941-02	1.239	8.796	568.1
87	20.000	.75000-01	1316.0	.1368	.1735	.1989	.9262	.1018-01	.6996-02	1.233	8.743	570.4
87	20.000	.10000+00	1318.0	.1292	.1636	.1874	.9262	.9587-02	.6609-02	1.172	8.594	569.2
87	20.000	.11000	1319.0	.1277	.1613	.1845	.9262	.9437-02	.6532-02	1.169	8.577	567.6
88	20.000	.95300	1432.0	.6800-01	.8690-01	.9980-01	.9267	.5103-02	.3481-02	.5990	4.383	574.4
87	22.500	.72400	1367.0	.9460-01	.1222	.1460	.9220	.7469-02	.4837-02	.8000	5.926	581.2
87	22.500	.74000	1368.0	.1053	.1375	.1660	.9220	.8492-02	.5387-02	.8580	6.234	587.3
87	22.500	.75000	1369.0	.1295	.1734	.2141	.9220	.1096-01	.6623-02	.9750	7.047	599.3
88	22.500	.76500	1370.0	.1011	.1289	.1524	.9220	.7793-02	.5172-02	.8950	6.662	573.4
88	22.500	.77100	1371.0	.8080-01	.1016	.1188	.9220	.6074-02	.4131-02	.7520	5.525	564.5
87	22.500	.92500	1372.0	.3580-01	.4520-01	.5290-01	.9220	.2707-02	.1834-02	.3310	2.432	566.0
87	22.500	.93900	1374.0	.3480-01	.4430-01	.5220-01	.9220	.2669-02	.1783-02	.3130	2.289	571.2
87	24.400	.95300	1433.0	.7500-01	.9640-01	.1113	.9265	.5695-02	.3837-02	.6450	4.707	578.5
87	35.000	.75000-01	1321.0	.1469	.1867	.2148	.9258	.1099-01	.7517-02	1.317	9.337	571.3
87	35.000	.11000	1322.0	.1133	.1427	.1631	.9258	.8346-02	.5797-02	1.051	7.855	565.2

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
87	35.600	.95300	1434.0	.5480-01	.6980-01	.8020-01	.9263	.4105-02	.2802-02	.4860	3.557	573.2
87	40.000	.95300	1435.0	.3830-01	.4850-01	.5560-01	.9262	.2842-02	.1959-02	.3470	2.543	569.5
87	45.000	.74000	1375.0	.1463	.1946	.2386	.9220	.1221-01	.7485-02	1.127	8.290	596.1
87	45.000	.75000	1376.0	.1831	.2489	.3115	.9220	.1594-01	.9369-02	1.324	9.698	605.3
88	45.000	.76500	1377.0	.1219	.1596	.1930	.9220	.9869-02	.6235-02	.9860	7.161	588.4
88	45.000	.77100	1378.0	.1129	.1498	.1833	.9220	.9375-02	.5772-02	.8740	6.330	595.0
88	45.000	.81500	1379.0	.6150-01	.7790-01	.9160-01	.9220	.4685-02	.3147-02	.5580	4.096	569.1
88	45.000	.88400	1381.0	.2540-01	.3220-01	.3780-01	.9220	.1934-02	.1299-02	.2300	1.688	569.3
88	45.000	.90700	1382.0	.1890-01	.2380-01	.2780-01	.9220	.1422-02	.9641-03	.1740	1.281	565.6
87	65.000	.11000	1323.0	.1871	.2402	.2780	.9261	.1422-01	.9570-02	1.615	11.60	577.9
87	67.500	.74000	1383.0	.1522	.2028	.2491	.9220	.1275-01	.7787-02	1.165	8.572	596.9
87	67.500	.75000	1384.0	.1613	.2192	.2742	.9220	.1403-01	.8254-02	1.167	8.553	605.1
88	67.500	.77100	1385.0	.1151	.1471	.1742	.9220	.8908-02	.5886-02	1.010	7.387	574.9
87	76.000	.10000+00	1324.0	.1351	.1720	.1973	.9265	.1010-01	.6914-02	1.204	8.818	572.4
87	76.000	.14100	1386.0	.1498	.2010	.2486	.9220	.1272-01	.7663-02	1.123	8.109	600.0
87	76.000	.14800	1387.0	.1208	.1535	.1809	.9220	.9256-02	.6179-02	1.083	7.929	571.4
87	76.000	.15500	1388.0	.8630-01	.1079	.1255	.9220	.6421-02	.4414-02	.8220	6.056	560.3
87	76.000	.16200	1389.0	.6090-01	.7570-01	.8760-01	.9220	.4483-02	.3117-02	.5960	4.398	555.5
87	77.500	.95300	1436.0	.3040-01	.3840-01	.4360-01	.9270	.2231-02	.1558-02	.2810	2.065	566.1
87	77.500	.99400	1439.0	.2740-01	.3500-01	.4010-01	.9270	.2050-02	.1399-02	.2400	1.757	574.9
88	90.000	.15000-01	1325.0	.2987	.3944	.4616	.9272	.2361-01	.1528-01	2.351	17.33	592.6
87	90.000	.25000-01	1326.0	.3807	.5247	.6337	.9273	.3242-01	.1948-01	2.649	18.72	610.5
88	90.000	.40000-01	1327.0	.2815	.3717	.4352	.9272	.2226-01	.1439-01	2.213	16.04	592.7
87	90.000	.60000-01	1328.0	.2163	.2792	.3216	.9273	.1645-01	.1107-01	1.836	12.55	580.7
87	90.000	.75000-01	1329.0	.1259	.1592	.1809	.9273	.9257-02	.6442-02	1.150	7.791	568.0
88	90.000	.13230	1479.0	.4105	.7528	1.412	.9220	.7223-01	.2099-01	1.723	12.06	664.4
88	90.000	.13390	1480.0	.3805	.7033	1.340	.9220	.6851-01	.1946-01	1.582	11.07	665.2
88	90.000	.13560	1481.0	.3486	.5795	.9213	.9220	.4711-01	.1783-01	1.670	11.75	652.8
88	90.000	.13730	1482.0	.2712	.4164	.5946	.9220	.3041-01	.1387-01	1.485	10.52	639.4
88	90.000	.13890	1483.0	.1875	.2663	.3483	.9220	.1781-01	.9587-02	1.209	8.643	620.4
88	90.000	.55000	1391.0	.9820-01	.1231	.1436	.9220	.7344-02	.5019-02	.9230	6.794	562.5
88	90.000	.65000	1392.0	.7470-01	.9470-01	.1114	.9220	.5699-02	.3822-02	.6760	4.954	569.7
87	90.000	.74000	1393.0	.2460-01	.3080-01	.3590-01	.9220	.1835-02	.1259-02	.2340	1.749	561.1
87	90.000	.76500	1394.0	.1730	.2253	.2712	.9220	.1387-01	.8852-02	1.424	10.36	585.7
87	90.000	.77100	1395.0	.7590-01	.9750-01	.1159	.9220	.5927-02	.3885-02	.6570	4.797	577.5
87	90.000	.81500	1396.0	.2700-01	.3380-01	.3920-01	.9220	.2006-02	.1383-02	.2600	1.947	558.8
87	90.000	.83700	1397.0	.1520-01	.1900-01	.2210-01	.9220	.1132-02	.7774-03	.1450	1.064	560.6
87	90.000	.88400	1398.0	.3170-01	.4000-01	.4670-01	.9220	.2391-02	.1624-02	.2950	2.166	565.1
87	90.000	.89400	1399.0	.3940-01	.4930-01	.5740-01	.9220	.2936-02	.2016-02	.3740	2.756	560.9
87	90.000	.90700	1400.0	.3350-01	.4200-01	.4910-01	.9220	.2511-02	.1713-02	.3140	2.311	563.2
87	90.000	.91700	1401.0	.3170-01	.3960-01	.4600-01	.9220	.2354-02	.1622-02	.3040	2.239	559.3
87	90.000	.93200	1402.0	.3230-01	.4060-01	.4750-01	.9220	.2430-02	.1651-02	.3000	2.205	564.9
87	90.000	.93900	1403.0	.2560-01	.3230-01	.3780-01	.9220	.1933-02	.1311-02	.2370	1.742	565.6

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR23)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
88	95.000	.13560	1484.0	.2917	.4691	.7111	.9220	.3637-01	.1492-01	1.473	10.39	647.8
88	95.000	.13730	1485.0	.2936	.4571	.6643	.9220	.3397-01	.1501-01	1.566	11.08	642.2
88	95.000	.13890	1486.0	.2314	.3578	.5153	.9220	.2635-01	.1184-01	1.251	8.856	640.8
88	95.000	.14560	1487.0	.2143	.2867	.3538	.9220	.1809-01	.1096-01	1.618	11.69	598.8
88	95.000	.14730	1488.0	.1655	.2128	.2533	.9220	.1295-01	.8463-02	1.422	10.38	578.5
87	104.00	.10000+00	1330.0	.1517	.1953	.2231	.9284	.1142-01	.7759-02	1.295	9.449	579.6
87	104.00	.12000	1404.0	.3049	.4393	.5833	.9220	.2984-01	.1560-01	1.903	13.58	624.6
87	104.00	.12700	1405.0	.2991	.4144	.5285	.9220	.2704-01	.1530-01	2.052	14.73	612.4
87	104.00	.13400	1406.0	.3014	.4669	.6741	.9220	.3449-01	.1542-01	1.624	11.50	641.2
87	104.00	.14100	1407.0	.2713	.4236	.6178	.9220	.3161-01	.1388-01	1.441	10.20	642.7
87	104.00	.14800	1408.0	.1712	.2225	.2673	.9220	.1367-01	.8761-02	1.420	10.33	584.5
87	104.00	.15500	1409.0	.1675	.2200	.2668	.9220	.1365-01	.8570-02	1.342	9.736	590.0
87	104.00	.16200	1410.0	.1435	.1882	.2280	.9220	.1167-01	.7340-02	1.153	8.367	589.5
87	104.00	.17300	1411.0	.9460-01	.1206	.1425	.9220	.7291-02	.4838-02	.8370	6.125	573.5
87	104.00	.18000	1412.0	.7610-01	.9590-01	.1122	.9220	.5740-02	.3893-02	.7050	5.178	565.5
87	104.00	.18600	1413.0	.6320-01	.7900-01	.9190-01	.9220	.4700-02	.3233-02	.6030	4.444	560.0
87	104.00	.19300	1414.0	.5000-01	.6210-01	.7180-01	.9220	.3674-02	.2556-02	.4890	3.611	555.2
87	104.00	.20000	1415.0	.4430-01	.5490-01	.6350-01	.9220	.3248-02	.2266-02	.4370	3.226	553.9
87	104.00	.25000	1416.0	.3860-01	.4820-01	.5600-01	.9220	.2866-02	.1976-02	.3700	2.774	559.2
88	112.00	.13560	1489.0	.1697	.2230	.2705	.9220	.1383-01	.8680-02	1.357	9.846	590.2
88	112.00	.13730	1490.0	.1849	.2490	.3090	.9220	.1580-01	.9455-02	1.371	9.892	601.5
88	112.00	.13890	1491.0	.1867	.2506	.3101	.9220	.1586-01	.9546-02	1.397	10.09	600.2
88	112.00	.14560	1492.0	.1975	.2582	.3119	.9220	.1595-01	.1010-01	1.604	11.65	587.7
88	112.00	.14730	1493.0	.1743	.2344	.2904	.9220	.1485-01	.8914-02	1.299	9.374	600.8
87	112.50	.74000	1417.0	.1122	.1645	.2228	.9220	.1140-01	.5738-02	.6730	4.790	629.3
87	112.50	.75000	1418.0	.8340-01	.1438	.2420	.9220	.1238-01	.4266-02	.3790	2.662	657.7
88	112.50	.77100	1419.0	.9030-01	.1250	.1591	.9220	.8137-02	.4619-02	.6220	4.542	611.8
87	112.50	.92500	1420.0	.4270-01	.5340-01	.6200-01	.9220	.3173-02	.2186-02	.4090	3.016	559.3
87	112.50	.93200	1421.0	.5310-01	.6680-01	.7820-01	.9220	.3998-02	.2717-02	.4940	3.627	564.9
87	112.50	.93900	1422.0	.4530-01	.5700-01	.6660-01	.9220	.3408-02	.2318-02	.4220	3.100	564.6
87	112.50	.95300	1440.0	.4350-01	.5480-01	.6120-01	.9298	.3129-02	.2227-02	.4050	2.973	564.8
88	112.50	.96700	1441.0	.4700-01	.5940-01	.6640-01	.9298	.3396-02	.2404-02	.4310	3.166	567.1
88	112.50	.99400	1443.0	.4420-01	.5660-01	.6380-01	.9298	.3264-02	.2262-02	.3860	2.823	575.8
88	135.00	.80000-02	1331.0	.4095	.5720	.6683	.9318	.3418-01	.2094-01	2.751	20.76	615.1
87	135.00	.25000-01	1332.0	.3750	.5257	.6156	.9318	.3149-01	.1919-01	2.498	17.90	616.3
88	135.00	.50000-01	1333.0	.2850	.3807	.4336	.9318	.2217-01	.1457-01	2.163	15.63	598.1
87	135.00	.75000-01	1334.0	.1523	.1964	.2195	.9318	.1123-01	.7791-02	1.295	9.602	580.4
87	135.00	.10000+00	1335.0	.1660	.2144	.2397	.9318	.1226-01	.8495-02	1.407	10.26	580.9
87	135.00	.40000	1423.0	.6430-01	.8180-01	.9650-01	.9220	.4936-02	.3289-02	.5740	4.275	572.0
88	135.00	.92500	1424.0	.4640-01	.5840-01	.6820-01	.9220	.3489-02	.2371-02	.4310	3.164	564.9
88	140.00	.13560	1494.0	.9330-01	.1184	.1395	.9220	.7132-02	.4769-02	.8380	6.138	570.8
88	140.00	.13730	1495.0	.9750-01	.1241	.1464	.9220	.7488-02	.4988-02	.8700	6.369	572.1
88	140.00	.13890	1496.0	.1008	.1285	.1519	.9220	.7767-02	.5156-02	.8930	6.533	573.3

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR23)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
88	140.00	.14560	1497.0	.1035	.1307	.1533	.9220	.7839-02	.5294-02	.9490	6.968	567.2
88	150.00	.14230	1499.0	.9420-01	.1187	.1389	.9221	.7104-02	.4817-02	.8700	6.389	565.9
88	180.00	.80000-02	1298.0	.4297	.6068	.6743	.9378	.3448-01	.2197-01	2.810	21.17	618.6
88	180.00	.15000-01	1299.0	.3245	.4321	.4701	.9378	.2404-01	.1659-01	2.485	17.68	596.7
87	180.00	.25000-01	1300.0	.4499	.6172	.6787	.9378	.3472-01	.2302-01	3.170	21.71	608.9
88	180.00	50000-01	1301.0	.3067	.4063	.4411	.9378	.2256-01	.1568-01	2.389	16.48	594.2
87	180.00	.75000-01	1302.0	.1938	.2515	.2711	.9378	.1387-01	.9916-02	1.615	11.02	583.7
88	180.00	.10000+00	1303.0	.2259	.3000	.3259	.9378	.1667-01	.1155-01	1.748	12.65	595.2
87	225.00	.98000	1425.0	.1213	.1728	.1861	.9416	.9519-02	.6207-02	.7780	5.558	621.3
87	225.00	.99400	1426.0	.4840-01	.6760-01	.7250-01	.9416	.3708-02	.2476-02	.3250	2.327	615.4
87	263.00	.13600	1336.0	.4880-01	.6070-01	.6980-01	.9230	.3570-02	.2498-02	.4780	3.529	555.2
88	263.00	.20000	1472.0	.5550-01	.6830-01	.7800-01	.9231	.3988-02	.2840-02	.5670	4.203	546.9
88	263.00	.30000	1337.0	.4830-01	.5960-01	.6810-01	.9231	.3484-02	.2472-02	.4890	3.684	548.7
88	263.00	.40000	1473.0	.4430-01	.5510-01	.6350-01	.9231	.3249-02	.2264-02	.4290	3.162	557.1
88	263.00	.50000	1474.0	.4610-01	.5730-01	.6590-01	.9231	.3372-02	.2355-02	.4480	3.309	556.1
88	263.00	.60000	1475.0	.4000-01	.4980-01	.5750-01	.9231	.2938-02	.2045-02	.3860	2.850	557.5
88	263.00	.75000	1338.0	.2080-01	.2700-01	.3220-01	.9231	.1647-02	.1065-02	.1730	1.260	583.9
88	263.00	.81500	1339.0	.2670-01	.3360-01	.3900-01	.9231	.1994-02	.1364-02	.2480	1.822	564.7
88	263.00	.83700	1340.0	.1880-01	.2360-01	.2750-01	.9231	.1404-02	.9614-03	.1750	1.287	564.3
88	263.00	.88400	1341.0	.1790-01	.2310-01	.2750-01	.9231	.1405-02	.9148-03	.1510	1.097	581.9
88	263.00	.89400	1342.0	.7350-01	.9240-01	.1072	.9231	.5481-02	.3760-02	.6880	5.060	563.5
88	263.00	.92800	1477.0	.5260-01	.6730-01	.7920-01	.9231	.4049-02	.2689-02	.4600	3.360	575.5
87	263.00	.93900	1344.0	.4330-01	.5720-01	.6920-01	.9230	.3539-02	.2215-02	.3400	2.464	593.0
88	270.00	.80000-02	1304.0	.2516	.3239	.3483	.9378	.1761-01	.1286-01	2.150	16.81	579.3
88	270.00	.50000-01	1306.0	.2263	.2914	.3134	.9378	.1603-01	.1157-01	1.932	13.42	579.6
87	270.00	.75000-01	1307.0	.1552	.1977	.2119	.9378	.1084-01	.7942-02	1.380	9.618	572.8
88	270.00	.10000+00	1308.0	.1754	.2269	.2444	.9378	.1250-01	.8969-02	1.474	10.74	582.1
87	270.00	.11500	1345.0	.1267	.1648	.1969	.9228	.1008-01	.6482-02	1.047	7.615	585.1
87	277.00	.13600	1346.0	.4560-01	.5650-01	.6500-01	.9226	.3323-02	.2334-02	.4530	3.348	552.6
87	277.00	.30000	1347.0	.5990-01	.7330-01	.8360-01	.9226	.4276-02	.3063-02	.6230	4.708	543.1
88	277.00	.40000	1464.0	.4430-01	.5470-01	.6270-01	.9226	.3208-02	.2266-02	.4460	3.299	549.9
88	277.00	.60000	1466.0	.3540-01	.4350-01	.4980-01	.9226	.2545-02	.1812-02	.3630	2.693	546.1
88	277.00	.70000	1467.0	.5380-01	.6660-01	.7650-01	.9226	.3914-02	.2753-02	.5360	3.965	551.8
87	277.00	.75000	1348.0	.7310-01	.9190-01	.1070	.9226	.5474-02	.3739-02	.6810	5.008	564.4
87	277.00	.81500	1349.0	.6680-01	.8290-01	.9550-01	.9226	.4886-02	.3417-02	.6560	4.846	554.6
87	277.00	.83700	1350.0	.6040-01	.7500-01	.8640-01	.9226	.4418-02	.3092-02	.5950	4.394	554.2
87	277.00	.88400	1351.0	.6790-01	.8520-01	.9890-01	.9226	.5062-02	.3472-02	.6380	4.695	562.7
87	277.00	.89400	1352.0	.7760-01	.9650-01	.1114	.9226	.5697-02	.3968-02	.7550	5.570	556.3
88	277.00	.90000	1468.0	.7970-01	.9940-01	.1150	.9226	.5879-02	.4077-02	.7680	5.664	558.1
88	277.00	.90700	1353.0	.7830-01	.9780-01	.1134	.9226	.5798-02	.4002-02	.7460	5.495	560.1
88	277.00	.92100	1469.0	.8830-01	.1095	.1261	.9226	.6447-02	.4518-02	.8710	6.440	553.6
88	277.00	.92800	1470.0	.8920-01	.1116	.1293	.9226	.6613-02	.4564-02	.8500	6.264	560.2
88	277.00	.93700	1471.0	.8330-01	.1050	.1225	.9226	.6266-02	.4258-02	.7680	5.637	566.3

DATE 23 JUN 81

IH72. AEDC V41A-R2A. INTEGRATED VEHICLE HEATING RATES

IH72. OTS W/PROTUBERANCES. RIGHT SRB

(RVZR23)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HI/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
87	277.00	.93900	1354.0	.9160-01	.1173	.1385	.9226	.7086-02	.4685-02	.7990	5.837	576.1
88	335.00	.11000	1309.0	.1545	.1964	.2211	.9294	.1130-01	.7901-02	1.383	10.13	571.5
87	337.50	.74000	1355.0	.9560-01	.1224	.1452	.9220	.7430-02	.4889-02	.8320	6.082	576.3
87	337.50	.75000	1356.0	.1076	.1389	.1658	.9220	.8485-02	.5506-02	.9130	6.773	580.7
88	337.50	.76500	1357.0	.6540-01	.8090-01	.9320-01	.9220	.4765-02	.3345-02	.6530	4.917	551.1
88	337.50	.92500	1359.0	.8730-01	.1109	.1306	.9220	.6678-02	.4466-02	.7850	5.751	570.7
88	337.50	.93200	1360.0	.1101	.1409	.1672	.9220	.8549-02	.5628-02	.9590	7.009	576.1
88	337.50	.93900	1361.0	.1507	.1947	.2328	.9220	.1190-01	.7708-02	1.273	9.282	581.3

RIGHT SRB

PARAMETRIC DATA

ALPHA = 5.000 BETA = 9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
97	5.090	9.100	4.020	72.80	745.0	176.0	.4670	5.279	2613.	.2225-03	.1417-06	4.103
98	5.080	9.000	4.020	72.60	736.0	173.8	.4650	5.265	2597.	.2246-03	.1400-06	4.168

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
97	.5113-01	.1136-01
98	.5097-01	.1129-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
97	.00000	.25000-01	1311.0	.2653	.3519	.4136	.9272	.2115-01	.1356-01	2.052	14.62	593.5
97	.00000	.76500	1362.0	.1107	.1409	.1664	.9220	.8506-02	.5658-02	.9810	7.311	571.3
97	.00000	.83700	1364.0	.3900-01	.4930-01	.5770-01	.9220	.2952-02	.1995-02	.3580	2.628	565.5
97	.00000	.88400	1365.0	.5770-01	.7460-01	.8920-01	.9220	.4562-02	.2952-02	.4860	3.545	580.2
97	.00000	.90700	1366.0	.7000-01	.9110-01	.1097	.9220	.5610-02	.3578-02	.5740	4.176	584.4
97	5.0000	.75000-01	1313.0	.1482	.1904	.2197	.9266	.1123-01	.7577-02	1.273	8.998	576.8
97	15.600	.95300	1431.0	.1697	.2275	.2718	.9260	.1390-01	.8678-02	1.273	9.201	598.1
97	20.000	.10000+00	1318.0	.1391	.1782	.2071	.9252	.1059-01	.7112-02	1.206	8.820	575.2
97	20.000	.11000	1319.0	.1404	.1791	.2074	.9252	.1060-01	.7180-02	1.238	9.061	572.4
97	20.000	.95300	1432.0	.1204	.1589	.1881	.9257	.9617-02	.6158-02	.9480	6.875	590.9
98	22.500	.72400	1367.0	.1168	.1530	.1850	.9220	.9431-02	.5954-02	.9270	6.874	580.0
97	22.500	.74000	1368.0	.1380	.1816	.2208	.9220	.1129-01	.7054-02	1.092	7.927	589.9
97	22.500	.75000	1369.0	.1351	.1823	.2268	.9220	.1159-01	.6906-02	.9920	7.162	601.1
98	22.500	.76500	1370.0	.1009	.1297	.1544	.9220	.7873-02	.5145-02	.8520	6.350	570.1
98	22.500	.77100	1371.0	.8730-01	.1104	.1296	.9220	.6607-02	.4451-02	.7830	5.769	559.8
97	22.500	.92500	1372.0	.4250-01	.5360-01	.6270-01	.9220	.3204-02	.2174-02	.3930	2.886	564.2
97	22.500	.93900	1374.0	.7390-01	.9470-01	.1125	.9220	.5751-02	.3778-02	.6400	4.676	575.5
97	24.400	.95300	1433.0	.1235	.1648	.1973	.9254	.1009-01	.6316-02	.9390	6.796	596.1
97	35.000	.75000-01	1321.0	.1604	.2080	.2452	.9244	.1253-01	.8202-02	1.336	9.422	581.9
97	35.000	.11000	1322.0	.1198	.1529	.1780	.9244	.9101-02	.6127-02	1.055	7.856	572.5

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR24)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
97	35.600	.95300	1434.0	.9370-01	.1214	.1428	.9248	.7299-02	.4792-02	.7820	5.697	581.7
97	40.000	.95300	1435.0	.7430-01	.9500-01	.1106	.9246	.5653-02	.3800-02	.6510	4.765	573.4
97	45.000	.74000	1375.0	.1673	.2257	.2805	.9220	.1434-01	.8554-02	1.231	9.039	600.8
97	45.000	.75000	1376.0	.1590	.2201	.2806	.9220	.1435-01	.8128-02	1.090	7.960	610.7
98	45.000	.76500	1377.0	.1068	.1393	.1678	.9220	.8552-02	.5445-02	.8600	6.281	577.7
98	45.000	.77100	1378.0	.9530-01	.1222	.1450	.9220	.7390-02	.4860-02	.8140	5.975	568.1
98	45.000	.81500	1379.0	.5400-01	.6820-01	.8000-01	.9220	.4079-02	.2752-02	.4860	3.578	559.3
98	45.000	.88400	1381.0	.2860-01	.3590-01	.4190-01	.9220	.2134-02	.1458-02	.2640	1.950	554.6
98	45.000	.90700	1382.0	.2080-01	.2600-01	.3020-01	.9220	.1539-02	.1058-02	.1940	1.437	552.0
97	65.000	.11000	1323.0	.2166	.2848	.3407	.9239	.1742-01	.1108-01	1.724	12.31	589.2
97	67.500	.74000	1383.0	.1654	.2239	.2791	.9220	.1427-01	.8457-02	1.206	8.849	602.2
97	67.500	.75000	1384.0	.1689	.2357	.3028	.9220	.1548-01	.8638-02	1.135	8.283	613.4
98	67.500	.77100	1385.0	.8970-01	.1150	.1365	.9220	.6955-02	.4574-02	.7660	5.623	568.1
97	76.000	.10000+00	1324.0	.1833	.2393	.2843	.9241	.1454-01	.9370-02	1.491	10.84	585.7
97	76.000	.14100	1386.0	.1953	.2705	.3447	.9220	.1762-01	.9986-02	1.339	9.616	610.7
97	76.000	.14800	1387.0	.1456	.1872	.2229	.9220	.1140-01	.7444-02	1.247	9.108	577.3
97	76.000	.15500	1388.0	.1162	.1469	.1724	.9220	.8817-02	.5941-02	1.058	7.770	566.7
97	76.000	.16200	1389.0	.8670-01	.1086	.1265	.9220	.6470-02	.4434-02	.8180	6.029	560.2
97	76.000	.25000	1390.0	.5900-02	.7100-02	.8100-02	.9220	.4134-03	.3007-03	.6400-01	.4870	531.8
97	77.500	.95300	1436.0	.3410-01	.4300-01	.4950-01	.9245	.2530-02	.1746-02	.3170	2.330	563.3
97	77.500	.99400	1439.0	.3990-01	.5100-01	.5930-01	.9245	.3032-02	.2042-02	.3520	2.578	572.4
98	90.000	.15000-01	1325.0	.3049	.4154	.5094	.9246	.2597-01	.1554-01	2.148	15.80	597.4
97	90.000	.25000-01	1326.0	.3664	.5244	.6719	.9245	.3435-01	.1873-01	2.316	16.28	621.2
98	90.000	.40000-01	1327.0	.3050	.4170	.5129	.9246	.2614-01	.1555-01	2.129	15.38	598.8
97	90.000	.60000-01	1328.0	.2313	.3048	.3637	.9245	.1859-01	.1182-01	1.825	12.41	590.4
97	90.000	.75000-01	1329.0	.1344	.1724	.2014	.9245	.1030-01	.6870-02	1.159	7.822	576.0
98	90.000	.13230	1479.0	.2727	.5109	1.000	.9220	.5098-01	.1390-01	1.096	7.703	656.8
98	90.000	.13390	1480.0	.2842	.5690	1.296	.9220	.6607-01	.1449-01	1.065	7.462	662.2
98	90.000	.13560	1481.0	.2763	.4816	.8249	.9220	.4205-01	.1408-01	1.215	8.567	649.4
98	90.000	.13730	1482.0	.2550	.4181	.6513	.9220	.3320-01	.1300-01	1.226	8.678	641.4
98	90.000	.13890	1483.0	.2208	.3406	.4895	.9220	.2495-01	.1125-01	1.176	8.367	631.1
98	90.000	.55000	1391.0	.9930-01	.1256	.1475	.9220	.7518-02	.5059-02	.8880	6.539	560.2
98	90.000	.65000	1392.0	.8340-01	.1063	.1256	.9220	.6402-02	.4252-02	.7260	5.337	564.8
97	90.000	.74000	1393.0	.3370-01	.4210-01	.4890-01	.9220	.2501-02	.1724-02	.3220	2.415	558.0
97	90.000	.76500	1394.0	.1470	.1887	.2243	.9220	.1147-01	.7518-02	1.268	9.263	576.2
97	90.000	.77100	1395.0	.9100-01	.1153	.1355	.9220	.6928-02	.4653-02	.8230	6.041	567.9
97	90.000	.81500	1396.0	.2040-01	.2530-01	.2930-01	.9220	.1498-02	.1044-02	.2000	1.503	553.2
97	90.000	.83700	1397.0	.1040-01	.1300-01	.1510-01	.9220	.7702-03	.5330-03	.1010	.7420	556.2
97	90.000	.88400	1398.0	.1850-01	.2320-01	.2700-01	.9220	.1380-02	.9441-03	.1740	1.278	560.9
97	90.000	.89400	1399.0	.3570-01	.4470-01	.5200-01	.9220	.2660-02	.1827-02	.3390	2.498	559.2
97	90.000	.90700	1400.0	.2890-01	.3630-01	.4230-01	.9220	.2164-02	.1479-02	.2710	1.997	561.4
97	90.000	.91700	1401.0	.3310-01	.4140-01	.4820-01	.9220	.2465-02	.1690-02	.3120	2.301	559.9
97	90.000	.93200	1402.0	.3820-01	.4820-01	.5640-01	.9220	.2882-02	.1954-02	.3530	2.592	564.3

IH72, OTS W/PROTUBERANCES, RIGHT SRB HI/HREF (RVZR24)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
97	90.000	.93900	1403.0	.4050-01	.5100-01	.5970-01	.9220	.3055-02	.2068-02	.3720	2.735	564.8
98	95.000	.13560	1484.0	.2751	.4610	.7418	.9220	.3781-01	.1402-01	1.279	9.040	644.5
98	95.000	.13730	1485.0	.2829	.4673	.7356	.9220	.3750-01	.1442-01	1.345	9.513	642.4
98	95.000	.13890	1486.0	.2630	.4392	.7029	.9220	.3583-01	.1340-01	1.229	8.687	644.0
98	95.000	.14560	1487.0	.2212	.3037	.3840	.9220	.1957-01	.1127-01	1.526	11.02	600.3
98	95.000	.14730	1488.0	.1794	.2347	.2837	.9220	.1446-01	.9143-02	1.426	10.41	579.7
97	104.00	.10000+00	1330.0	.1931	.2558	.3044	.9254	.1556-01	.9875-02	1.501	10.88	592.8
97	104.00	.12000	1404.0	.2747	.4061	.5548	.9220	.2837-01	.1404-01	1.616	11.50	629.7
97	104.00	.12700	1405.0	.2658	.3743	.4851	.9220	.2480-01	.1359-01	1.747	12.52	616.2
97	104.00	.13400	1406.0	.2867	.4621	.7028	.9220	.3593-01	.1466-01	1.438	10.15	646.7
97	104.00	.14100	1407.0	.2798	.4590	.7157	.9220	.3659-01	.1431-01	1.365	9.622	649.4
97	104.00	.14800	1408.0	.1902	.2504	.3044	.9220	.1556-01	.9724-02	1.506	10.93	589.9
97	104.00	.15500	1409.0	.1809	.2404	.2947	.9220	.1507-01	.9247-02	1.390	10.07	594.4
97	104.00	.16200	1410.0	.1557	.2062	.2519	.9220	.1288-01	.7960-02	1.211	8.776	592.7
97	104.00	.17300	1411.0	.1093	.1401	.1664	.9220	.8509-02	.5587-02	.9450	6.909	575.6
97	104.00	.18000	1412.0	.8670-01	.1096	.1287	.9220	.6578-02	.4433-02	.7900	5.801	566.6
97	104.00	.18600	1413.0	.7400-01	.9280-01	.1081	.9220	.5528-02	.3785-02	.6980	5.138	560.5
97	104.00	.19300	1414.0	.5750-01	.7150-01	.8270-01	.9220	.4230-02	.2938-02	.5590	4.129	554.6
97	104.00	.20000	1415.0	.5010-01	.6220-01	.7180-01	.9220	.3673-02	.2561-02	.4910	3.632	552.9
97	104.00	.25000	1416.0	.5200-01	.6470-01	.7500-01	.9220	.3836-02	.2657-02	.5020	3.772	555.7
98	112.00	.13560	1489.0	.1861	.2508	.3113	.9220	.1587-01	.9488-02	1.354	9.814	592.9
98	112.00	.13730	1490.0	.1963	.2733	.3501	.9220	.1784-01	.1001-01	1.308	9.419	605.0
98	112.00	.13890	1491.0	.1952	.2719	.3487	.9220	.1777-01	.9950-02	1.297	9.342	605.3
98	112.00	.14560	1492.0	.2121	.2859	.3550	.9220	.1809-01	.1081-01	1.542	11.17	593.1
98	112.00	.14730	1493.0	.1971	.2734	.3492	.9220	.1780-01	.1004-01	1.323	9.538	603.9
97	112.50	.74000	1417.0	.1573	.2183	.2791	.9220	.1427-01	.8040-02	1.070	7.685	611.7
97	112.50	.75000	1418.0	.2512	.3922	.5718	.9220	.2924-01	.1285-01	1.331	9.422	641.2
98	112.50	.77100	1419.0	.1236	.1656	.2045	.9220	.1043-01	.6298-02	.9130	6.734	590.7
97	112.50	.92500	1420.0	.4100-01	.5140-01	.5980-01	.9220	.3057-02	.2098-02	.3880	2.861	559.6
97	112.50	.93200	1421.0	.4670-01	.5880-01	.6880-01	.9220	.3519-02	.2388-02	.4320	3.175	564.0
97	112.50	.93900	1422.0	.4130-01	.5210-01	.6110-01	.9220	.3122-02	.2114-02	.3800	2.795	564.9
97	112.50	.95300	1440.0	.4130-01	.5230-01	.5970-01	.9266	.3054-02	.2111-02	.3740	2.741	567.8
98	112.50	.96700	1441.0	.5010-01	.6380-01	.7320-01	.9266	.3729-02	.2552-02	.4360	3.207	564.7
98	112.50	.99400	1443.0	.4220-01	.5470-01	.6350-01	.9266	.3236-02	.2150-02	.3460	2.527	574.9
98	135.00	.80000-02	1331.0	.4098	.5941	.7328	.9290	.3735-01	.2089-01	2.476	18.67	617.1
97	135.00	.25000-01	1332.0	.3981	.5741	.7053	.9290	.3606-01	.2036-01	2.473	17.66	623.3
98	135.00	.50000-01	1333.0	.2946	.4042	.4791	.9290	.2442-01	.1502-01	2.039	14.72	599.9
97	135.00	.75000-01	1334.0	.1601	.2090	.2398	.9290	.1226-01	.8187-02	1.304	9.649	585.5
97	135.00	.10000+00	1335.0	.1711	.2235	.2566	.9290	.1312-01	.8749-02	1.390	10.11	585.9
97	135.00	.40000	1423.0	.7550-01	.9520-01	.1115	.9220	.5703-02	.3861-02	.6950	5.193	564.8
98	135.00	.92500	1424.0	.3720-01	.4690-01	.5490-01	.9220	.2796-02	.1899-02	.3390	2.504	556.9
98	140.00	.13560	1494.0	.1043	.1339	.1592	.9220	.8113-02	.5317-02	.8850	6.493	569.2
98	140.00	.13730	1495.0	.1062	.1365	.1625	.9220	.8283-02	.5413-02	.8970	6.572	570.0

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
98	140.00	.13890	1496.0	.1092	.1406	.1677	.9220	.8547-02	.5564-02	.9150	6.703	571.2
98	140.00	.14560	1497.0	.1087	.1387	.1641	.9220	.8362-02	.5542-02	.9430	6.927	565.5
98	150.00	.14230	1499.0	.9810-01	.1250	.1475	.9220	.7520-02	.5003-02	.8580	6.304	564.3
98	180.00	.80000-02	1298.0	.4320	.6343	.7179	.9376	.3659-01	.2202-01	2.540	19.12	620.3
97	180.00	.15000-01	1299.0	.3520	.4809	.5291	.9376	.2697-01	.1794-01	2.463	17.51	598.4
98	180.00	.25000-01	1300.0	.5034	.7058	.7843	.9376	.4010-01	.2574-01	3.341	22.81	615.0
97	180.00	.50000-01	1301.0	.3271	.4431	.4860	.9376	.2477-01	.1668-01	2.344	16.16	595.1
98	180.00	.75000-01	1302.0	.2097	.2743	.2971	.9376	.1519-01	.1072-01	1.695	11.55	586.7
97	180.00	.10000+00	1303.0	.2310	.3131	.3435	.9376	.1751-01	.1177-01	1.651	11.95	595.4
97	225.00	.98000	1425.0	.1263	.1880	.1964	.9456	.1004-01	.6455-02	.7320	5.205	631.4
97	225.00	.99400	1426.0	.7050-01	.1018	.1059	.9456	.5415-02	.3607-02	.4370	3.122	623.6
97	263.00	.13600	1336.0	.7090-01	.8860-01	.1013	.9250	.5177-02	.3625-02	.6750	4.979	558.5
98	263.00	.20000	1472.0	.7060-01	.8810-01	.1006	.9250	.5130-02	.3597-02	.6640	4.917	550.9
98	263.00	.30000	1337.0	.6500-01	.8070-01	.9180-01	.9250	.4680-02	.3312-02	.6250	4.716	546.9
98	263.00	.40000	1473.0	.5230-01	.6560-01	.7510-01	.9250	.3829-02	.2666-02	.4850	3.581	553.9
98	263.00	.50000	1474.0	.5050-01	.6300-01	.7200-01	.9250	.3671-02	.2573-02	.4750	3.513	551.1
98	263.00	.60000	1475.0	.5330-01	.6660-01	.7610-01	.9250	.3877-02	.2719-02	.5020	3.717	550.9
98	263.00	.75000	1338.0	.6870-01	.9110-01	.1088	.9250	.5547-02	.3501-02	.5240	3.811	586.0
98	263.00	.81500	1339.0	.5400-01	.6870-01	.7960-01	.9250	.4057-02	.2751-02	.4720	3.468	564.2
98	263.00	.83700	1340.0	.3900-01	.4970-01	.5750-01	.9250	.2932-02	.1989-02	.3410	2.511	564.0
98	263.00	.88400	1341.0	.4410-01	.5830-01	.6950-01	.9250	.3543-02	.2246-02	.3390	2.463	584.9
98	263.00	.89400	1342.0	.9760-01	.1250	.1455	.9250	.7417-02	.4975-02	.8340	6.121	568.0
98	263.00	.92800	1477.0	.8660-01	.1137	.1348	.9250	.6871-02	.4413-02	.6810	4.964	581.4
97	263.00	.93900	1344.0	.8070-01	.1105	.1356	.9250	.6934-02	.4125-02	.5690	4.096	606.8
98	270.00	.80000-02	1304.0	.2784	.3683	.3851	.9432	.1963-01	.1419-01	2.139	16.67	585.0
98	270.00	.50000-01	1306.0	.2679	.3562	.3729	.9432	.1901-01	.1366-01	2.026	14.02	587.3
97	270.00	.75000-01	1307.0	.1816	.2351	.2448	.9432	.1252-01	.9282-02	1.518	10.54	581.3
98	270.00	.10000+00	1308.0	.2072	.2761	.2891	.9432	.1474-01	.1056-01	1.557	11.31	588.3
97	270.00	.11500	1345.0	.1515	.1999	.2386	.9247	.1220-01	.7746-02	1.191	8.638	591.1
97	277.00	.13600	1346.0	.6350-01	.7900-01	.9030-01	.9243	.4618-02	.3245-02	.6160	4.546	555.1
97	277.00	.30000	1347.0	.6320-01	.7770-01	.8800-01	.9243	.4500-02	.3231-02	.6460	4.875	544.9
98	277.00	.40000	1464.0	.4540-01	.5650-01	.6460-01	.9243	.3293-02	.2316-02	.4350	3.224	547.9
98	277.00	.60000	1466.0	.3800-01	.4710-01	.5360-01	.9243	.2734-02	.1937-02	.3700	2.749	544.5
98	277.00	.70000	1467.0	.4890-01	.6130-01	.7060-01	.9243	.3596-02	.2492-02	.4520	3.341	554.2
97	277.00	.75000	1348.0	.7840-01	.9990-01	.1163	.9243	.5944-02	.4008-02	.6940	5.083	571.6
97	277.00	.81500	1349.0	.6080-01	.7650-01	.8820-01	.9243	.4510-02	.3109-02	.5640	4.151	563.2
97	277.00	.83700	1350.0	.5730-01	.7210-01	.8320-01	.9243	.4252-02	.2929-02	.5310	3.904	563.5
97	277.00	.88400	1351.0	.6890-01	.8780-01	.1022	.9243	.5224-02	.3525-02	.6110	4.477	571.4
97	277.00	.89400	1352.0	.7610-01	.9610-01	.1110	.9243	.5675-02	.3893-02	.6990	5.137	565.2
98	277.00	.90000	1468.0	.6880-01	.8770-01	.1022	.9243	.5210-02	.3506-02	.5970	4.388	565.3
98	277.00	.90700	1353.0	.6330-01	.8120-01	.9510-01	.9243	.4849-02	.3224-02	.5360	3.931	569.4
98	277.00	.92100	1469.0	.9390-01	.1188	.1376	.9243	.7015-02	.4785-02	.8390	6.176	560.4
98	277.00	.92800	1470.0	.8940-01	.1144	.1338	.9243	.6818-02	.4555-02	.7650	5.611	567.8

IH72. OTS W/PROTUBERANCES, RIGHT SRB HI/HREF

(RVZR24)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
98	277.00	.93700	1471.0	.9210-01	.1194	.1410	.9243	.7185-02	.4692-02	.7540	5.511	575.1
97	277.00	.93900	1354.0	.6340-01	.8390-01	.1006	.9243	.5143-02	.3244-02	.4950	3.592	592.1
98	335.00	.11000	1309.0	.1756	.2281	.2574	.9309	.1312-01	.8952-02	1.431	10.46	575.8
97	337.50	.74000	1355.0	.7780-01	.1000+00	.1191	.9220	.6087-02	.3977-02	.6660	4.866	577.2
97	337.50	.75000	1356.0	.7490-01	.9740-01	.1171	.9220	.5985-02	.3827-02	.6170	4.566	583.7
98	337.50	.76500	1357.0	.8070-01	.1008	.1172	.9220	.5974-02	.4112-02	.7570	5.698	551.5
98	337.50	.92500	1359.0	.1124	.1476	.1789	.9220	.9116-02	.5730-02	.8850	6.453	581.2
98	337.50	.93200	1360.0	.1511	.2016	.2480	.9220	.1264-01	.7704-02	1.132	8.220	588.7
98	337.50	.93900	1361.0	.2271	.3103	.3904	.9220	.1990-01	.1157-01	1.588	11.48	598.5

PARAMETRIC DATA

ALPHA = -5.000 BETA = -5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
263	-5.090	-5.100	3.010	37.10	705.0	250.7	.9950	6.308	2335.	.3329-03	.2005-06	3.877
264	-5.090	-5.100	3.010	37.10	705.0	250.7	.9940	6.302	2335.	.3326-03	.2005-06	3.873

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
263	.5543-01	.9209-02
264	.5540-01	.9214-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
264	.00000	.80000-02	1310.0	.3292	.4341	.4408	.9476	.2442-01	.1824-01	2.659	20.48	559.1
263	.00000	.25000-01	1311.0	.3468	.4655	.4732	.9476	.2623-01	.1922-01	2.657	19.19	566.6
263	.00000	.83700	1364.0	.4730-01	.6210-01	.6850-01	.9350	.3794-02	.2621-02	.3880	2.863	556.8
263	.00000	.88400	1365.0	.4540-01	.5900-01	.6480-01	.9350	.3594-02	.2518-02	.3850	2.851	551.8
263	.00000	.90700	1366.0	.3880-01	.5050-01	.5550-01	.9350	.3075-02	.2148-02	.3270	2.415	552.8
263	5.0000	.75000-01	1313.0	.1880	.2414	.2440	.9481	.1353-01	.1042-01	1.660	11.92	545.5
263	5.0000	.11000	1314.0	.1295	.1650	.1667	.9481	.9238-02	.7180-02	1.178	8.763	540.8
263	20.000	.75000-01	1316.0	.1992	.2582	.2591	.9494	.1436-01	.1104-01	1.704	12.21	550.6
263	20.000	.10000+00	1318.0	.2368	.3093	.3104	.9494	.1720-01	.1312-01	1.974	14.58	554.5
263	20.000	.11000	1319.0	.2377	.3101	.3112	.9494	.1725-01	.1318-01	1.991	14.71	553.8
264	22.500	.72400	1367.0	.6540-01	.8650-01	.9550-01	.9354	.5288-02	.3621-02	.5230	3.914	560.6
263	22.500	.74000	1368.0	.8400-01	.1105	.1217	.9354	.6744-02	.4655-02	.6840	5.043	558.0
263	22.500	.75000	1369.0	.8900-01	.1170	.1287	.9354	.7133-02	.4935-02	.7290	5.378	557.2
264	22.500	.76500	1370.0	.7450-01	.9790-01	.1078	.9354	.5971-02	.4129-02	.6090	4.570	557.4
264	22.500	.77100	1371.0	.7270-01	.9550-01	.1051	.9354	.5822-02	.4027-02	.5950	4.386	557.3
263	22.500	.92500	1372.0	.3620-01	.4630-01	.5040-01	.9354	.2795-02	.2007-02	.3240	2.406	543.5
263	22.500	.93900	1374.0	.4890-01	.6310-01	.6890-01	.9354	.3821-02	.2713-02	.4260	3.154	548.0
263	24.400	.95300	1433.0	.1094	.1481	.1475	.9505	.8177-02	.6062-02	.8170	5.990	570.0
263	35.000	.75000-01	1321.0	.1965	.2543	.2541	.9501	.1409-01	.1089-01	1.687	12.09	550.0
263	35.000	.11000	1322.0	.2276	.2966	.2964	.9501	.1643-01	.1262-01	1.913	14.38	553.3

IH72. OTS CLEAN. RIGHT SRB HI/HREF (RVZR25)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
263	35.600	.95300	1434.0	.1072	.1431	.1421	.9510	.7876-02	.5943-02	.8360	6.147	564.2
263	40.000	.95300	1435.0	.1045	.1388	.1378	.9511	.7638-02	.5792-02	.8260	6.077	562.3
263	45.000	.74000	1375.0	.6450-01	.8390-01	.9190-01	.9356	.5095-02	.3573-02	.5430	4.081	552.9
263	45.000	.75000	1376.0	.7270-01	.9460-01	.1036	.9356	.5741-02	.4028-02	.6120	4.605	552.8
264	45.000	.76500	1377.0	.7220-01	.9470-01	.1040	.9356	.5761-02	.3997-02	.5930	4.373	556.7
264	45.000	.77100	1378.0	.6970-01	.9130-01	.1002	.9356	.5552-02	.3863-02	.5770	4.257	555.7
264	45.000	.88400	1381.0	.3090-01	.3910-01	.4240-01	.9356	.2348-02	.1711-02	.2860	2.131	537.6
264	45.000	.90700	1382.0	.2780-01	.3530-01	.3820-01	.9356	.2117-02	.1539-02	.2560	1.903	538.8
263	65.000	.11000	1323.0	.2843	.3799	.3806	.9497	.2109-01	.1576-01	2.207	15.95	564.8
263	67.500	.74000	1383.0	.7920-01	.1024	.1120	.9354	.6206-02	.4391-02	.6840	5.149	549.2
263	67.500	.75000	1384.0	.7220-01	.9350-01	.1023	.9354	.5671-02	.4000-02	.6180	4.652	550.4
264	67.500	.77100	1385.0	.7000-01	.9100-01	.9980-01	.9354	.5526-02	.3881-02	.5930	4.386	552.1
263	76.000	.10000+00	1324.0	.2214	.2945	.2966	.9490	.1644-01	.1227-01	1.742	12.82	562.9
263	76.000	.14100	1386.0	.1720	.2262	.2492	.9353	.1381-01	.9535-02	1.404	10.35	557.6
263	76.000	.14800	1387.0	.1560	.2029	.2227	.9353	.1234-01	.8645-02	1.316	9.733	552.6
263	76.000	.15500	1388.0	.1309	.1687	.1844	.9353	.1022-01	.7255-02	1.140	8.450	547.7
263	76.000	.16200	1389.0	.1217	.1562	.1705	.9353	.9449-02	.6743-02	1.074	7.970	545.6
263	76.000	.25000	1390.0	.6090-01	.7670-01	.8300-01	.9353	.4602-02	.3375-02	.5780	4.384	533.8
263	77.500	.95300	1436.0	.5750-01	.7500-01	.7520-01	.9496	.4166-02	.3186-02	.4810	3.555	553.9
263	77.500	.96700	1437.0	.9870-01	.1296	.1299	.9496	.7199-02	.5468-02	.8070	5.952	557.3
263	77.500	.99400	1439.0	.1050	.1393	.1396	.9496	.7740-02	.5821-02	.8330	6.132	561.7
264	90.000	.15000-01	1325.0	.2940	.3864	.3923	.9476	.2173-01	.1629-01	2.400	18.00	557.5
263	90.000	.25000-01	1326.0	.3479	.4714	.4795	.9476	.2658-01	.1928-01	2.593	18.69	570.4
264	90.000	.40000-01	1327.0	.2429	.3192	.3240	.9476	.1795-01	.1346-01	1.985	14.64	557.4
263	90.000	.60000-01	1328.0	.1866	.2422	.2457	.9476	.1362-01	.1034-01	1.586	11.00	551.5
263	90.000	.75000-01	1329.0	.1084	.1387	.1405	.9476	.7790-02	.6010-02	.9710	6.662	543.2
264	90.000	.13230	1479.0	.2524	.3578	.4090	.9350	.2266-01	.1398-01	1.673	12.17	585.3
264	90.000	.13390	1480.0	.2014	.2765	.3113	.9350	.1724-01	.1116-01	1.448	10.59	575.1
264	90.000	.13560	1481.0	.1661	.2214	.2459	.9350	.1362-01	.9203-02	1.300	9.556	563.7
264	90.000	.13730	1482.0	.1636	.2170	.2405	.9350	.1332-01	.9062-02	1.298	9.554	561.7
264	90.000	.13890	1483.0	.1409	.1845	.2033	.9350	.1126-01	.7805-02	1.164	8.593	555.8
264	90.000	.55000	1391.0	.7980-01	.1036	.1138	.9350	.6306-02	.4420-02	.6770	5.009	551.7
264	90.000	.65000	1392.0	.9430-01	.1225	.1345	.9350	.7450-02	.5227-02	.8020	5.935	551.4
263	90.000	.76500	1394.0	.8020-01	.1032	.1128	.9350	.6254-02	.4443-02	.7030	5.212	546.7
263	90.000	.77100	1395.0	.7900-01	.1008	.1099	.9350	.6091-02	.4377-02	.7120	5.295	542.1
263	90.000	.81500	1396.0	.1440-01	.1810-01	.1960-01	.9350	.1084-02	.7988-03	.1390	1.056	531.0
263	90.000	.83700	1397.0	.2470-01	.3110-01	.3370-01	.9350	.1868-02	.1367-02	.2340	1.743	534.0
263	90.000	.88400	1398.0	.2240-01	.2800-01	.3030-01	.9350	.1680-02	.1243-02	.2190	1.635	529.0
263	90.000	.89400	1399.0	.4140-01	.5110-01	.5490-01	.9350	.3044-02	.2294-02	.4260	3.204	519.1
263	90.000	.90700	1400.0	.3510-01	.4410-01	.4780-01	.9350	.2648-02	.1947-02	.3370	2.517	531.9
263	90.000	.91700	1401.0	.4310-01	.5420-01	.5880-01	.9350	.3259-02	.2387-02	.4080	3.049	533.8
263	90.000	.93200	1402.0	.4150-01	.5260-01	.5720-01	.9350	.3168-02	.2300-02	.3850	2.865	537.6
263	90.000	.93900	1403.0	.4900-01	.6250-01	.6810-01	.9350	.3772-02	.2716-02	.4440	3.301	541.4

IH72, OTS CLEAN, RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
264	95.000	.13560	1484.0	.1337	.1778	.1975	.9349	.1094-01	.7406-02	1.051	7.732	563.0
264	95.000	.13730	1485.0	.1219	.1597	.1762	.9349	.9763-02	.6752-02	1.004	7.412	556.2
264	95.000	.13890	1486.0	.1104	.1442	.1589	.9349	.8804-02	.6117-02	.9190	6.790	554.6
264	95.000	.14560	1487.0	.8590-01	.1108	.1215	.9349	.6730-02	.4758-02	.7450	5.518	548.4
264	95.000	.14730	1488.0	.7930-01	.1019	.1114	.9349	.6172-02	.4395-02	.7000	5.196	545.6
263	104.00	.10000+00	1330.0	.2612	.3539	.3642	.9460	.2018-01	.1448-01	1.948	14.27	570.3
263	104.00	.12000	1404.0	.1589	.2146	.2402	.9348	.1331-01	.8809-02	1.198	8.783	568.9
263	104.00	.12700	1405.0	.2230	.3100	.3519	.9348	.1950-01	.1236-01	1.551	11.32	579.3
263	104.00	.13400	1406.0	.1221	.1606	.1777	.9348	.9849-02	.6768-02	.9950	7.335	557.9
263	104.00	.14100	1407.0	.1035	.1339	.1470	.9348	.8147-02	.5737-02	.8920	6.602	549.5
263	104.00	.14800	1408.0	.7760-01	.9940-01	.1086	.9348	.6021-02	.4303-02	.6930	5.150	543.7
263	104.00	.15500	1409.0	.6700-01	.8520-01	.9290-01	.9348	.5151-02	.3713-02	.6120	4.551	540.1
263	104.00	.16200	1410.0	.6260-01	.7960-01	.8670-01	.9348	.4806-02	.3472-02	.5750	4.283	539.2
263	104.00	.18000	1412.0	.4500-01	.5690-01	.6190-01	.9348	.3432-02	.2493-02	.4190	3.122	536.8
263	104.00	.18600	1413.0	.4300-01	.5450-01	.5920-01	.9348	.3284-02	.2385-02	.4010	2.987	536.8
263	104.00	.19300	1414.0	.3960-01	.5020-01	.5470-01	.9348	.3032-02	.2196-02	.3660	2.728	538.1
263	104.00	.20000	1415.0	.3030-01	.3860-01	.4210-01	.9348	.2333-02	.1680-02	.2760	2.054	540.5
263	104.00	.25000	1416.0	.2140-01	.2720-01	.2960-01	.9348	.1641-02	.1186-02	.1960	1.487	539.2
264	112.00	.13560	1489.0	.6810-01	.8820-01	.9690-01	.9346	.5371-02	.3774-02	.5850	4.330	549.9
264	112.00	.13730	1490.0	.6030-01	.7790-01	.8550-01	.9346	.4735-02	.3342-02	.5230	3.876	548.4
264	112.00	.13890	1491.0	.5370-01	.6890-01	.7540-01	.9346	.4178-02	.2974-02	.4760	3.529	545.0
264	112.00	.14560	1492.0	.1630-01	.2070-01	.2250-01	.9346	.1247-02	.9041-03	.1520	1.130	537.2
263	112.50	.74000	1417.0	.6180-01	.8020-01	.8830-01	.9346	.4894-02	.3425-02	.5260	3.891	551.3
263	112.50	.75000	1418.0	.6010-01	.7800-01	.8590-01	.9346	.4761-02	.3333-02	.5120	3.788	551.2
264	112.50	.77100	1419.0	.5530-01	.7150-01	.7860-01	.9346	.4353-02	.3066-02	.4780	3.599	549.1
263	112.50	.92500	1420.0	.4240-01	.5330-01	.5790-01	.9346	.3211-02	.2349-02	.4030	3.012	533.2
263	112.50	.93200	1421.0	.4120-01	.5200-01	.5660-01	.9346	.3138-02	.2282-02	.3860	2.877	535.8
263	112.50	.93900	1422.0	.4520-01	.5750-01	.6280-01	.9346	.3479-02	.2507-02	.4130	3.075	540.0
263	112.50	.95300	1440.0	.3440-01	.4480-01	.4600-01	.9457	.2550-02	.1906-02	.2890	2.136	553.3
264	112.50	.96700	1441.0	.5980-01	.7900-01	.8120-01	.9457	.4499-02	.3314-02	.4810	3.547	559.6
264	112.50	.99400	1443.0	.1004	.1337	.1376	.9457	.7623-02	.5564-02	.7890	5.800	563.2
263	135.00	.25000-01	1332.0	.2482	.3316	.3498	.9423	.1939-01	.1375-01	1.926	14.16	564.8
264	135.00	.50000-01	1333.0	.1779	.2317	.2430	.9423	.1346-01	.9857-02	1.497	11.07	553.0
263	135.00	.75000-01	1334.0	.8530-01	.1097	.1148	.9423	.6361-02	.4727-02	.7480	5.645	546.5
263	135.00	.10000+00	1335.0	.1246	.1624	.1704	.9423	.9442-02	.6906-02	1.046	7.734	553.3
263	135.00	.40000	1423.0	.4260-01	.5530-01	.6100-01	.9345	.3380-02	.2359-02	.3610	2.712	552.0
264	135.00	.92500	1424.0	.4700-01	.5980-01	.6530-01	.9345	.3616-02	.2606-02	.4310	3.206	539.6
264	140.00	.13560	1494.0	.4020-01	.5110-01	.5580-01	.9345	.3092-02	.2227-02	.3680	2.736	539.8
264	140.00	.13730	1495.0	.4010-01	.5100-01	.5580-01	.9345	.3089-02	.2220-02	.3650	2.713	540.6
264	140.00	.13890	1496.0	.3830-01	.4890-01	.5350-01	.9345	.2964-02	.2119-02	.3430	2.551	542.9
264	140.00	.14560	1497.0	.3120-01	.3980-01	.4360-01	.9345	.2414-02	.1728-02	.2810	2.088	542.4
264	150.00	.14230	1499.0	.3200-01	.4070-01	.4450-01	.9345	.2466-02	.1772-02	.2910	2.163	540.8
264	180.00	.80000-02	1298.0	.2896	.3908	.4253	.9384	.2356-01	.1604-01	2.184	16.86	568.8

IH72, OTS CLEAN, RIGHT SRB HI/HREF (RVZR25)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
264	180.00	.15000-01	1299.0	.1476	.1923	.2069	.9384	.1146-01	.8177-02	1.239	9.011	553.3
263	180.00	.25000-01	1300.0	.2239	.2953	.3190	.9384	.1768-01	.1241-01	1.810	12.70	559.1
264	180.00	.50000-01	1301.0	.1796	.2341	.2519	.9384	.1395-01	.9949-02	1.506	10.60	553.6
263	180.00	.75000-01	1302.0	.7420-01	.9580-01	.1027	.9384	.5693-02	.4111-02	.6420	4.461	548.6
264	180.00	.10000+00	1303.0	.1265	.1668	.1801	.9384	.9976-02	.7011-02	1.024	7.551	558.8
263	225.00	.98000	1425.0	.8640-01	.1230	.1375	.9376	.7623-02	.4790-02	.5670	4.124	586.4
263	263.00	.13600	1336.0	.2800-01	.3550-01	.3870-01	.9345	.2144-02	.1552-02	.2600	1.933	537.6
264	263.00	.20000	1472.0	.2600-01	.3330-01	.3650-01	.9345	.2024-02	.1441-02	.2310	1.715	544.6
264	263.00	.30000	1337.0	.5260-01	.6830-01	.7530-01	.9345	.4169-02	.2914-02	.4470	3.360	551.6
264	263.00	.40000	1473.0	.4620-01	.6040-01	.6670-01	.9345	.3696-02	.2559-02	.3840	2.835	554.9
264	263.00	.50000	1474.0	.3090-01	.4040-01	.4460-01	.9345	.2470-02	.1714-02	.2590	1.912	554.0
264	263.00	.60000	1475.0	.1490-01	.1930-01	.2130-01	.9345	.1178-02	.8256-03	.1270	.9430	550.6
264	263.00	.75000	1338.0	.1150-01	.1500-01	.1660-01	.9345	.9171-03	.6386-03	.9700-01	.7180	552.8
264	263.00	.81500	1339.0	.2260-01	.2950-01	.3260-01	.9345	.1806-02	.1250-02	.1870	1.384	555.0
264	263.00	.83700	1340.0	.2480-01	.3240-01	.3580-01	.9345	.1984-02	.1372-02	.2050	1.516	555.3
264	263.00	.88400	1341.0	.2480-01	.3250-01	.3600-01	.9345	.1992-02	.1375-02	.2050	1.512	555.9
264	263.00	.89400	1342.0	.2310-01	.3030-01	.3340-01	.9345	.1853-02	.1281-02	.1920	1.416	555.2
264	263.00	.92800	1477.0	.3040-01	.4000-01	.4430-01	.9345	.2455-02	.1682-02	.2470	1.819	558.2
263	263.00	.93900	1344.0	.5410-01	.7170-01	.7980-01	.9345	.4422-02	.2997-02	.4290	3.158	561.7
264	270.00	.80000-02	1304.0	.1882	.2418	.2589	.9384	.1434-01	.1043-01	1.660	13.20	545.7
264	270.00	.50000-01	1306.0	.1770	.2313	.2491	.9384	.1380-01	.9807-02	1.472	10.36	554.8
263	270.00	.75000-01	1307.0	.1052	.1363	.1463	.9384	.8110-02	.5829-02	.9000	6.345	550.5
264	270.00	.10000+00	1308.0	.1425	.1878	.2028	.9384	.1123-01	.7896-02	1.154	8.507	558.7
263	270.00	.11500	1345.0	.9310-01	.1230	.1367	.9345	.7575-02	.5159-02	.7470	5.502	560.1
263	277.00	.13600	1346.0	.3240-01	.4090-01	.4460-01	.9345	.2469-02	.1795-02	.3040	2.265	535.7
263	277.00	.30000	1347.0	.4140-01	.5340-01	.5870-01	.9345	.3251-02	.2294-02	.3600	2.710	548.1
264	277.00	.40000	1464.0	.4280-01	.5580-01	.6160-01	.9345	.3411-02	.2372-02	.3590	2.656	553.4
264	277.00	.60000	1466.0	.1190-01	.1550-01	.1700-01	.9345	.9444-03	.6611-03	.1020	.7530	551.0
264	277.00	.70000	1467.0	.2140-01	.2790-01	.3080-01	.9345	.1705-02	.1183-02	.1780	1.318	554.1
263	277.00	.75000	1348.0	.2620-01	.3410-01	.3760-01	.9345	.2081-02	.1451-02	.2210	1.637	552.3
263	277.00	.81500	1349.0	.4110-01	.5390-01	.5970-01	.9345	.3309-02	.2275-02	.3360	2.481	557.1
263	277.00	.83700	1350.0	.2580-01	.3400-01	.3770-01	.9345	.2091-02	.1430-02	.2090	1.539	558.8
263	277.00	.88400	1351.0	.1380-01	.1800-01	.1990-01	.9345	.1105-02	.7627-03	.1140	.8390	555.9
264	277.00	.90000	1468.0	.1210-01	.1600-01	.1770-01	.9345	.9810-03	.6718-03	.9800-01	.7260	558.4
264	277.00	.90700	1353.0	.1470-01	.1930-01	.2150-01	.9345	.1189-02	.8134-03	.1190	.8770	558.7
264	277.00	.92100	1469.0	.2200-01	.2910-01	.3220-01	.9345	.1787-02	.1220-02	.1770	1.308	559.4
264	277.00	.92800	1470.0	.2750-01	.3640-01	.4040-01	.9345	.2239-02	.1523-02	.2200	1.619	560.5
264	277.00	.93700	1471.0	.3650-01	.4840-01	.5380-01	.9345	.2981-02	.2019-02	.2890	2.127	561.8
263	277.00	.93900	1354.0	.6670-01	.8950-01	.1002	.9345	.5552-02	.3698-02	.5110	3.753	566.6
264	335.00	.11000	1309.0	.2171	.2837	.2933	.9447	.1625-01	.1203-01	1.805	13.33	554.8
263	337.50	.74000	1355.0	.7120-01	.9440-01	.1049	.9346	.5812-02	.3945-02	.5660	4.164	561.5
263	337.50	.75000	1356.0	.6660-01	.8820-01	.9800-01	.9346	.5432-02	.3690-02	.5300	3.967	561.3
264	337.50	.76500	1357.0	.5420-01	.7210-01	.8020-01	.9346	.4445-02	.3000-02	.4250	3.180	563.2

DATE 23 JUN 81

IH72. AEDC V41A-R2A. INTEGRATED VEHICLE HEATING RATES

IH72. OTS CLEAN.

RIGHT SRB HI/HREF

(RVZR25)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
264	337.50	.92500	1359.0	.2800-01	.3690-01	.4080-01	.9346	.2262-02	.1552-02	.2280	1.680	558.1
264	337.50	.93200	1360.0	.3190-01	.4220-01	.4680-01	.9346	.2593-02	.1768-02	.2560	1.886	560.1
264	337.50	.93900	1361.0	.4420-01	.5910-01	.6600-01	.9346	.3657-02	.2448-02	.3410	2.507	565.5

RIGHT SRB

PARAMETRIC DATA

ALPHA = -5.000 BETA = .0000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
259	-5.080	.0000	3.010	37.00	705.0	250.7	.9930	6.300	2335.	.3324-03	.2006-06	3.871
260	-5.080	.0000	3.010	37.10	705.0	250.7	.9940	6.303	2335.	.3326-03	.2005-06	3.874

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
259	.5539-01	.9216-02
260	.5540-01	.9213-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
260	.00000	.80000-02	1310.0	.3522	.4655	.4724	.9477	.2617-01	.1951-01	2.825	21.75	560.1
259	.00000	.25000-01	1311.0	.4017	.5479	.5572	.9477	.3086-01	.2225-01	2.939	21.16	572.9
259	.00000	.83700	1364.0	.7190-01	.9500-01	.1051	.9350	.5820-02	.3980-02	.5770	4.248	560.1
259	.00000	.88400	1365.0	.8020-01	.1052	.1161	.9350	.6429-02	.4440-02	.6570	4.850	557.0
259	.00000	.90700	1366.0	.6960-01	.9140-01	.1009	.9350	.5590-02	.3855-02	.5690	4.196	557.4
259	5.0000	.75000-01	1313.0	.1998	.2593	.2629	.9477	.1456-01	.1107-01	1.700	12.17	551.4
259	5.0000	.11000	1314.0	.6650-01	.8440-01	.8550-01	.9477	.4734-02	.3686-02	.6140	4.572	538.4
259	20.000	.75000-01	1316.0	.2139	.2801	.2848	.9474	.1577-01	.1185-01	1.769	12.64	555.8
259	20.000	.10000+00	1318.0	.2358	.3111	.3164	.9474	.1753-01	.1306-01	1.901	14.01	559.4
259	20.000	.11000	1319.0	.2362	.3108	.3161	.9474	.1751-01	.1308-01	1.920	14.16	558.2
260	22.500	.72400	1367.0	.9960-01	.1304	.1438	.9349	.7970-02	.5519-02	.8230	6.180	555.8
259	22.500	.74000	1368.0	.9850-01	.1303	.1443	.9349	.7994-02	.5457-02	.7890	5.810	560.5
259	22.500	.75000	1369.0	.1138	.1508	.1672	.9349	.9259-02	.6305-02	.9060	6.673	561.3
260	22.500	.76500	1370.0	.1088	.1422	.1568	.9349	.8685-02	.6026-02	.9030	6.779	555.1
260	22.500	.77100	1371.0	.1069	.1397	.1540	.9349	.8533-02	.5921-02	.8870	6.550	555.1
259	22.500	.92500	1372.0	.6330-01	.8260-01	.9090-01	.9349	.5035-02	.3506-02	.5300	3.913	554.0
259	22.500	.93900	1374.0	.6950-01	.9140-01	.1010	.9349	.5595-02	.3851-02	.5670	4.180	557.9
259	24.400	.95300	1433.0	.1546	.2140	.2174	.9480	.1204-01	.8561-02	1.086	7.930	578.1
259	35.000	.75000-01	1321.0	.2082	.2719	.2776	.9466	.1537-01	.1153-01	1.737	12.42	554.4
259	35.000	.11000	1322.0	.2168	.2847	.2908	.9466	.1611-01	.1201-01	1.776	13.33	557.1

IH72, OTS CLEAN, RIGHT SRB HI/HREF

(RVZR26)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
259	35.600	.95300	1434.0	.1596	.2189	.2233	.9474	.1237-01	.8838-02	1.149	8.400	575.0
259	40.000	.95300	1435.0	.1569	.2148	.2195	.9471	.1216-01	.8689-02	1.136	8.308	574.3
259	45.000	.74000	1375.0	.1004	.1315	.1453	.9347	.8048-02	.5560-02	.8270	6.208	556.2
259	45.000	.75000	1376.0	.1023	.1339	.1478	.9347	.8185-02	.5668-02	.8480	6.367	555.4
260	45.000	.76500	1377.0	.1057	.1372	.1509	.9347	.8362-02	.5856-02	.8990	6.650	551.4
260	45.000	.77100	1378.0	.1025	.1329	.1462	.9347	.8100-02	.5677-02	.8730	6.459	551.1
260	45.000	.88400	1381.0	.7350-01	.9390-01	.1025	.9347	.5678-02	.4075-02	.6640	4.934	542.0
260	45.000	.90700	1382.0	.7190-01	.9170-01	.1002	.9347	.5549-02	.3982-02	.6480	4.819	542.1
259	65.000	.11000	1323.0	.2743	.3714	.3866	.9444	.2142-01	.1519-01	2.048	14.77	570.2
259	67.500	.74000	1383.0	.9840-01	.1281	.1413	.9346	.7824-02	.5449-02	.8280	6.226	553.0
259	67.500	.75000	1384.0	.9760-01	.1273	.1405	.9346	.7784-02	.5408-02	.8170	6.143	553.9
260	67.500	.77100	1385.0	.1050	.1350	.1481	.9346	.8208-02	.5815-02	.9200	6.823	546.7
259	76.000	.10000+00	1324.0	.2741	.3709	.3888	.9435	.2153-01	.1518-01	2.050	15.03	570.0
259	76.000	.14100	1386.0	.1783	.2364	.2628	.9345	.1456-01	.9878-02	1.418	10.44	561.4
259	76.000	.14800	1387.0	.1623	.2123	.2347	.9345	.1300-01	.8988-02	1.344	9.923	555.5
259	76.000	.15500	1388.0	.1511	.1973	.2179	.9345	.1207-01	.8370-02	1.261	9.312	554.4
259	76.000	.16200	1389.0	.1406	.1821	.2004	.9345	.1110-01	.7787-02	1.204	8.915	550.3
259	76.000	.25000	1390.0	.6160-01	.7750-01	.8430-01	.9345	.4667-02	.3411-02	.5850	4.443	533.5
259	77.500	.96700	1437.0	.1443	.1935	.2017	.9440	.1117-01	.7994-02	1.109	8.141	566.3
259	77.500	.99400	1439.0	.8060-01	.1079	.1124	.9440	.6225-02	.4465-02	.6230	4.576	565.5
260	90.000	.15000-01	1325.0	.2952	.3876	.4071	.9423	.2256-01	.1636-01	2.419	18.15	557.0
259	90.000	.25000-01	1326.0	.3615	.4980	.5287	.9423	.2928-01	.2002-01	2.574	18.50	576.5
260	90.000	.40000-01	1327.0	.2821	.3705	.3892	.9423	.2156-01	.1563-01	2.309	17.03	557.2
259	90.000	.60000-01	1328.0	.2049	.2679	.2812	.9423	.1558-01	.1135-01	1.702	11.78	555.1
259	90.000	.75000-01	1329.0	.1199	.1548	.1620	.9423	.8972-02	.6642-02	1.040	7.113	548.5
260	90.000	.13230	1479.0	.2534	.3618	.4171	.9345	.2311-01	.1404-01	1.652	12.01	587.2
260	90.000	.13390	1480.0	.2339	.3255	.3705	.9345	.2052-01	.1296-01	1.623	11.84	579.7
260	90.000	.13560	1481.0	.1971	.2645	.2960	.9345	.1640-01	.1092-01	1.509	11.08	566.7
260	90.000	.13730	1482.0	.1686	.2229	.2476	.9345	.1372-01	.9339-02	1.351	9.948	560.3
260	90.000	.13890	1483.0	.1500	.1957	.2161	.9345	.1197-01	.8312-02	1.256	9.279	553.8
260	90.000	.55000	1391.0	.9940-01	.1283	.1411	.9345	.7816-02	.5506-02	.8600	6.374	548.7
260	90.000	.65000	1392.0	.7620-01	.9820-01	.1079	.9345	.5978-02	.4222-02	.6640	4.919	547.7
259	90.000	.74000	1393.0	.8100-02	.1040-01	.1140-01	.9345	.6290-03	.4506-03	.7300-01	.5550	542.2
259	90.000	.76500	1394.0	.8290-01	.1086	.1201	.9345	.6651-02	.4592-02	.6850	5.056	555.9
259	90.000	.77100	1395.0	.8580-01	.1114	.1227	.9345	.6798-02	.4752-02	.7290	5.395	551.6
259	90.000	.81500	1396.0	.1014	.1305	.1433	.9345	.7937-02	.5614-02	.8860	6.680	547.2
259	90.000	.83700	1397.0	.6970-01	.8970-01	.9850-01	.9345	.5453-02	.3863-02	.6120	4.537	546.7
259	90.000	.88400	1398.0	.5140-01	.6550-01	.7160-01	.9345	.3964-02	.2850-02	.4680	3.482	540.7
259	90.000	.89400	1399.0	.5420-01	.6780-01	.7350-01	.9345	.4071-02	.3001-02	.5270	3.943	529.4
259	90.000	.90700	1400.0	.5870-01	.7500-01	.8210-01	.9345	.4549-02	.3254-02	.5280	3.921	542.8
259	90.000	.91700	1401.0	.5610-01	.7180-01	.7860-01	.9345	.4354-02	.3106-02	.5000	3.717	543.9
259	90.000	.93200	1402.0	.5380-01	.6920-01	.7600-01	.9345	.4211-02	.2978-02	.4700	3.483	547.3
259	90.000	.93900	1403.0	.6030-01	.7830-01	.8630-01	.9345	.4781-02	.3343-02	.5130	3.795	551.6

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN, RIGHT SRB HI/HREF

(RVZR26)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
260	95.000	.13560	1484.0	.1642	.2195	.2451	.9345	.1358-01	.9095-02	1.272	9.344	565.1
260	95.000	.13730	1485.0	.1517	.1988	.2200	.9345	.1219-01	.8404-02	1.250	9.225	556.2
260	95.000	.13890	1486.0	.1417	.1839	.2027	.9345	.1123-01	.7850-02	1.204	8.909	551.5
260	95.000	.14560	1487.0	.1174	.1523	.1677	.9345	.9291-02	.6507-02	1.003	7.421	550.8
260	95.000	.14730	1488.0	.1092	.1409	.1549	.9345	.8583-02	.6047-02	.9450	7.002	548.6
259	104.00	.10000+00	1330.0	.2246	.3101	.3323	.9413	.1840-01	.1244-01	1.591	11.62	577.2
259	104.00	.12000	1404.0	.1946	.2678	.3031	.9345	.1679-01	.1078-01	1.390	10.16	576.0
259	104.00	.12700	1405.0	.2177	.3057	.3495	.9345	.1936-01	.1206-01	1.477	10.76	582.5
259	104.00	.13400	1406.0	.1523	.2035	.2272	.9345	.1258-01	.8438-02	1.182	8.689	564.9
259	104.00	.14100	1407.0	.1254	.1638	.1810	.9345	.1003-01	.6944-02	1.043	7.703	554.8
259	104.00	.14800	1408.0	.1046	.1356	.1494	.9345	.8273-02	.5792-02	.8920	6.599	551.0
259	104.00	.15500	1409.0	.9390-01	.1210	.1329	.9345	.7359-02	.5203-02	.8200	6.079	547.4
259	104.00	.16200	1410.0	.8440-01	.1082	.1185	.9345	.6566-02	.4677-02	.7510	5.573	544.5
259	104.00	.18000	1412.0	.6100-01	.7770-01	.8490-01	.9345	.4704-02	.3376-02	.5520	4.107	541.4
259	104.00	.18600	1413.0	.5560-01	.7090-01	.7740-01	.9345	.4289-02	.3080-02	.5050	3.753	541.2
259	104.00	.19300	1414.0	.5290-01	.6730-01	.7360-01	.9345	.4075-02	.2930-02	.4810	3.580	540.7
259	104.00	.20000	1415.0	.4530-01	.5770-01	.6310-01	.9345	.3494-02	.2510-02	.4110	3.059	541.1
259	104.00	.25000	1416.0	.2700-01	.3420-01	.3730-01	.9345	.2067-02	.1494-02	.2490	1.886	538.3
260	112.00	.13560	1489.0	.1028	.1331	.1464	.9345	.8113-02	.5693-02	.8820	6.526	550.1
260	112.00	.13730	1490.0	.9110-01	.1176	.1292	.9345	.7161-02	.5046-02	.7890	5.843	548.6
260	112.00	.13890	1491.0	.8120-01	.1042	.1143	.9345	.6330-02	.4500-02	.7190	5.334	545.2
260	112.00	.14560	1492.0	.2330-01	.2960-01	.3230-01	.9345	.1787-02	.1292-02	.2160	1.607	538.0
259	112.50	.74000	1417.0	.8430-01	.1123	.1252	.9345	.6936-02	.4671-02	.6600	4.857	563.6
259	112.50	.75000	1418.0	.8280-01	.1104	.1230	.9345	.6816-02	.4586-02	.6480	4.761	563.8
260	112.50	.77100	1419.0	.7200-01	.9400-01	.1039	.9345	.5757-02	.3987-02	.5990	4.498	554.7
259	112.50	.92500	1420.0	.5200-01	.6670-01	.7310-01	.9345	.4048-02	.2881-02	.4610	3.424	544.9
259	112.50	.93200	1421.0	.5120-01	.6600-01	.7250-01	.9345	.4014-02	.2838-02	.4470	3.317	547.4
259	112.50	.93900	1422.0	.5710-01	.7400-01	.8160-01	.9345	.4518-02	.3162-02	.4860	3.600	551.1
259	112.50	.95300	1440.0	.1071	.1437	.1529	.9412	.8467-02	.5930-02	.8200	6.022	566.7
260	112.50	.96700	1441.0	.6530-01	.8650-01	.9170-01	.9412	.5081-02	.3617-02	.5200	3.828	561.1
260	112.50	.99400	1443.0	.3970-01	.5280-01	.5600-01	.9412	.3105-02	.2198-02	.3120	2.292	563.1
259	135.00	.25000-01	1332.0	.2466	.3362	.3643	.9394	.2018-01	.1366-01	1.806	13.22	572.8
260	135.00	.50000-01	1333.0	.1926	.2512	.2685	.9394	.1488-01	.1067-01	1.613	11.92	553.8
259	135.00	.75000-01	1334.0	.9250-01	.1201	.1283	.9394	.7104-02	.5123-02	.7850	5.903	551.8
259	135.00	.10000+00	1335.0	.1071	.1406	.1506	.9394	.8340-02	.5934-02	.8790	6.482	557.0
259	135.00	.40000	1423.0	.4490-01	.5920-01	.6570-01	.9345	.3637-02	.2488-02	.3640	2.726	558.8
260	135.00	.92500	1424.0	.6450-01	.8260-01	.9050-01	.9345	.5012-02	.3572-02	.5740	4.265	544.1
260	140.00	.13560	1494.0	.5030-01	.6370-01	.6940-01	.9345	.3845-02	.2788-02	.4680	3.488	537.0
260	140.00	.13730	1495.0	.5100-01	.6470-01	.7060-01	.9345	.3912-02	.2827-02	.4700	3.503	538.5
260	140.00	.13890	1496.0	.5440-01	.6930-01	.7570-01	.9345	.4193-02	.3013-02	.4940	3.677	540.8
260	140.00	.14560	1497.0	.5020-01	.6380-01	.6960-01	.9345	.3857-02	.2783-02	.4620	3.436	539.1
260	150.00	.14230	1499.0	.4940-01	.6260-01	.6830-01	.9345	.3786-02	.2735-02	.4550	3.388	538.5
260	180.00	.80000-02	1298.0	.2957	.4007	.4366	.9384	.2419-01	.1638-01	2.202	16.99	570.5

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN, RIGHT SRB HI/HREF

(RVZR26)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
260	180.00	.15000-01	1299.0	.1635	.2127	.2286	.9384	.1267-01	.9059-02	1.381	10.04	552.5
259	180.00	.25000-01	1300.0	.2280	.3066	.3331	.9384	.1845-01	.1263-01	1.737	12.14	567.4
260	180.00	.50000-01	1301.0	.1883	.2449	.2632	.9384	.1458-01	.1043-01	1.591	11.21	552.4
259	180.00	.75000-01	1302.0	.9660-01	.1253	.1346	.9384	.7457-02	.5350-02	.8220	5.701	551.4
260	180.00	.10000+00	1303.0	.1267	.1659	.1787	.9384	.9900-02	.7019-02	1.047	7.730	555.7
259	225.00	.98000	1425.0	.4150-01	.5950-01	.6520-01	.9399	.3612-02	.2299-02	.2680	1.947	588.4
259	263.00	.13600	1336.0	.4620-01	.5830-01	.6350-01	.9345	.3517-02	.2562-02	.4360	3.251	534.9
260	263.00	.20000	1472.0	.7420-01	.9470-01	.1036	.9345	.5738-02	.4108-02	.6680	4.964	542.3
260	263.00	.30000	1337.0	.7220-01	.9230-01	.1010	.9345	.5593-02	.4001-02	.6490	4.905	542.7
260	263.00	.40000	1473.0	.5710-01	.7340-01	.8050-01	.9345	.4462-02	.3165-02	.5030	3.728	546.1
260	263.00	.50000	1474.0	.4790-01	.6160-01	.6750-01	.9345	.3741-02	.2656-02	.4230	3.137	545.7
260	263.00	.60000	1475.0	.4180-01	.5370-01	.5890-01	.9345	.3264-02	.2314-02	.3670	2.725	546.2
260	263.00	.75000	1338.0	.3330-01	.4250-01	.4650-01	.9345	.2579-02	.1844-02	.2990	2.220	542.9
260	263.00	.81500	1339.0	.2340-01	.3010-01	.3300-01	.9345	.1826-02	.1297-02	.2070	1.535	545.5
260	263.00	.83700	1340.0	.2060-01	.2650-01	.2910-01	.9345	.1610-02	.1141-02	.1810	1.342	546.4
260	263.00	.88400	1341.0	.1940-01	.2490-01	.2730-01	.9345	.1514-02	.1073-02	.1700	1.261	546.4
260	263.00	.89400	1342.0	.1960-01	.2520-01	.2760-01	.9345	.1531-02	.1085-02	.1720	1.275	546.5
260	263.00	.92800	1477.0	.3830-01	.4960-01	.5460-01	.9345	.3025-02	.2122-02	.3280	2.430	550.2
259	263.00	.93900	1344.0	.7910-01	.1047	.1164	.9345	.6445-02	.4382-02	.6320	4.654	560.8
260	270.00	.80000-02	1304.0	.2186	.2808	.2936	.9423	.1626-01	.1211-01	1.927	15.32	545.8
260	270.00	.50000-01	1306.0	.2165	.2805	.2938	.9423	.1628-01	.1199-01	1.853	13.06	550.5
259	270.00	.75000-01	1307.0	.1429	.1848	.1935	.9423	.1072-01	.7915-02	1.230	8.678	549.6
260	270.00	.10000+00	1308.0	.1720	.2240	.2349	.9423	.1302-01	.9527-02	1.445	10.68	553.2
259	270.00	.11500	1345.0	.1234	.1640	.1825	.9345	.1011-01	.6838-02	.9750	7.178	562.3
259	277.00	.13600	1346.0	.4450-01	.5610-01	.6100-01	.9345	.3381-02	.2463-02	.4190	3.124	535.0
259	277.00	.30000	1347.0	.7380-01	.9490-01	.1041	.9345	.5768-02	.4089-02	.6490	4.893	546.4
260	277.00	.40000	1464.0	.5720-01	.7340-01	.8040-01	.9345	.4454-02	.3170-02	.5080	3.769	544.8
260	277.00	.60000	1466.0	.5690-01	.7300-01	.8010-01	.9345	.4436-02	.3151-02	.5020	3.725	545.6
260	277.00	.70000	1467.0	.4250-01	.5470-01	.6000-01	.9345	.3323-02	.2354-02	.3730	2.766	546.5
259	277.00	.75000	1348.0	.3910-01	.5050-01	.5560-01	.9345	.3077-02	.2166-02	.3380	2.502	549.1
259	277.00	.81500	1349.0	.3470-01	.4510-01	.4980-01	.9345	.2756-02	.1921-02	.2920	2.162	552.7
259	277.00	.83700	1350.0	.3070-01	.4020-01	.4440-01	.9345	.2460-02	.1703-02	.2550	1.886	555.0
259	277.00	.88400	1351.0	.2570-01	.3340-01	.3690-01	.9345	.2042-02	.1424-02	.2170	1.608	552.3
259	277.00	.89400	1352.0	.2630-01	.3430-01	.3780-01	.9345	.2094-02	.1457-02	.2210	1.636	553.1
260	277.00	.90000	1468.0	.2660-01	.3440-01	.3790-01	.9345	.2098-02	.1476-02	.2300	1.704	549.0
260	277.00	.90700	1353.0	.2760-01	.3560-01	.3920-01	.9345	.2171-02	.1529-02	.2390	1.767	548.9
260	277.00	.92100	1469.0	.3000-01	.3880-01	.4270-01	.9345	.2366-02	.1663-02	.2590	1.916	549.4
260	277.00	.92800	1470.0	.3630-01	.4700-01	.5170-01	.9345	.2865-02	.2012-02	.3120	2.309	549.9
260	277.00	.93700	1471.0	.3740-01	.4860-01	.5360-01	.9345	.2970-02	.2075-02	.3180	2.350	551.8
259	277.00	.93900	1354.0	.5090-01	.6780-01	.7560-01	.9345	.4189-02	.2819-02	.3980	2.925	563.9
260	335.00	.11000	1309.0	.2376	.3114	.3171	.9472	.1757-01	.1317-01	1.958	14.45	556.2
259	337.50	.74000	1355.0	.8290-01	.1091	.1205	.9349	.6677-02	.4594-02	.6750	4.979	558.0
259	337.50	.75000	1356.0	.1042	.1381	.1531	.9349	.8481-02	.5772-02	.8290	6.207	561.4

IH72, OTS CLEAN, RIGHT SRB HI/HREF (RVZR26)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
260	337.50	.76500	1357.0	.1013	.1328	.1465	.9349	.8119-02	.5614-02	.8340	6.262	556.3
260	337.50	.92500	1359.0	.5760-01	.7510-01	.8270-01	.9349	.4582-02	.3192-02	.4830	3.567	553.7
260	337.50	.93200	1360.0	.6330-01	.8280-01	.9130-01	.9349	.5058-02	.3505-02	.5230	3.864	555.6
260	337.50	.93900	1361.0	.6530-01	.8660-01	.9600-01	.9349	.5321-02	.3620-02	.5190	3.823	561.5

PARAMETRIC DATA

ALPHA = -5.000 BETA = 5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
261	-5.100	5.100	3.010	37.10	705.0	250.7	.9950	6.307	2335.	.3329-03	.2005-06	3.876
262	-5.090	5.100	3.010	37.10	705.0	250.8	.9950	6.310	2336.	.3328-03	.2006-06	3.875

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
261	.5542-01	.9210-02
262	.5544-01	.9211-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
262	.00000	.80000-02	1310.0	.3656	.4963	.5049	.9476	.2799-01	.2027-01	2.714	20.78	571.4
261	.00000	.25000-01	1311.0	.3858	.5419	.5526	.9476	.3062-01	.2138-01	2.616	18.75	582.5
261	.00000	.76500	1362.0	.1725	.2293	.2545	.9350	.1410-01	.9558-02	1.358	10.16	562.8
261	.00000	.83700	1364.0	.9090-01	.1196	.1320	.9350	.7316-02	.5040-02	.7420	5.474	557.6
261	.00000	.88400	1365.0	.1058	.1382	.1522	.9350	.8436-02	.5862-02	.8800	6.499	554.8
261	.00000	.90700	1366.0	.8720-01	.1141	.1258	.9350	.6972-02	.4832-02	.7210	5.322	555.7
261	5.0000	.75000-01	1313.0	.1980	.2594	.2642	.9471	.1464-01	.1097-01	1.633	11.67	556.1
261	5.0000	.11000	1314.0	.8440-01	.1075	.1092	.9471	.6054-02	.4679-02	.7680	5.716	540.7
261	20.000	.75000-01	1316.0	.2097	.2772	.2859	.9453	.1584-01	.1162-01	1.681	11.98	560.3
261	20.000	.10000+00	1318.0	.2331	.3120	.3222	.9453	.1786-01	.1292-01	1.800	13.22	565.6
261	20.000	.11000	1319.0	.2323	.3108	.3210	.9453	.1779-01	.1287-01	1.796	13.19	565.4
262	22.500	.72400	1367.0	.1099	.1452	.1611	.9346	.8934-02	.6093-02	.8830	6.615	560.4
261	22.500	.74000	1368.0	.1276	.1701	.1894	.9346	.1050-01	.7074-02	.9990	7.348	563.7
261	22.500	.75000	1369.0	.1516	.2022	.2254	.9346	.1249-01	.8399-02	1.181	8.685	564.2
262	22.500	.76500	1370.0	.1280	.1690	.1875	.9346	.1040-01	.7097-02	1.031	7.723	560.1
262	22.500	.77100	1371.0	.1245	.1644	.1823	.9346	.1011-01	.6904-02	1.005	7.403	559.8
261	22.500	.92500	1372.0	.6500-01	.8420-01	.9260-01	.9346	.5130-02	.3602-02	.5570	4.124	550.2
261	22.500	.93900	1374.0	.6530-01	.8580-01	.9500-01	.9346	.5263-02	.3618-02	.5340	3.936	557.4
261	24.400	.95300	1433.0	.1365	.1885	.1953	.9455	.1082-01	.7563-02	.9660	7.054	577.2
261	35.000	.75000-01	1321.0	.2016	.2654	.2769	.9434	.1535-01	.1117-01	1.638	11.68	558.3

IH72, OTS CLEAN, RIGHT SRB HI/HREF (RVZR27)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
261	35.000	.11000	1322.0	.2170	.2895	.3027	.9434	.1678-01	.1202-01	1.692	12.65	564.2
261	35.600	.95300	1434.0	.1149	.1576	.1649	.9440	.9141-02	.6367-02	.8280	6.053	574.9
261	40.000	.95300	1435.0	.1013	.1387	.1457	.9435	.8076-02	.5611-02	.7320	5.357	574.4
261	45.000	.74000	1375.0	.1228	.1619	.1797	.9345	.9957-02	.6808-02	.9940	7.449	558.9
261	45.000	.75000	1376.0	.1226	.1617	.1793	.9345	.9940-02	.6797-02	.9920	7.439	558.9
262	45.000	.76500	1377.0	.1269	.1672	.1855	.9345	.1028-01	.7035-02	1.029	7.586	559.0
262	45.000	.77100	1378.0	.1194	.1568	.1737	.9345	.9629-02	.6618-02	.9780	7.211	557.6
262	45.000	.88400	1381.0	.5440-01	.6920-01	.7560-01	.9345	.4189-02	.3016-02	.4980	3.703	540.3
262	45.000	.90700	1382.0	.4550-01	.5810-01	.6350-01	.9345	.3522-02	.2525-02	.4120	3.062	542.2
261	65.000	.11000	1323.0	.3089	.4329	.4698	.9402	.2604-01	.1712-01	2.105	15.09	581.9
261	67.500	.74000	1383.0	.1145	.1498	.1657	.9345	.9182-02	.6346-02	.9490	7.123	555.4
261	67.500	.75000	1384.0	.1117	.1464	.1619	.9345	.8975-02	.6189-02	.9200	6.909	556.2
262	67.500	.77100	1385.0	.1151	.1498	.1652	.9345	.9161-02	.6379-02	.9710	7.174	553.2
261	76.000	.10000+00	1324.0	.2976	.4171	.4563	.9393	.2529-01	.1649-01	2.029	14.79	581.9
261	76.000	.14100	1386.0	.2178	.2913	.3254	.9345	.1803-01	.1207-01	1.685	12.38	565.3
261	76.000	.14800	1387.0	.1597	.2097	.2323	.9345	.1287-01	.8852-02	1.308	9.652	557.1
261	76.000	.15500	1388.0	.1394	.1821	.2012	.9345	.1115-01	.7724-02	1.160	8.570	554.7
261	76.000	.16200	1389.0	.1584	.2062	.2276	.9345	.1261-01	.8776-02	1.332	9.850	553.1
261	76.000	.25000	1390.0	.6470-01	.8140-01	.8850-01	.9345	.4905-02	.3583-02	.6140	4.659	533.6
261	77.500	.95300	1436.0	.6520-01	.8810-01	.9490-01	.9397	.5261-02	.3616-02	.4920	3.605	569.0
261	77.500	.96700	1437.0	.7060-01	.9610-01	.1038	.9397	.5753-02	.3911-02	.5190	3.803	572.1
261	77.500	.99400	1439.0	.5650-01	.7660-01	.8270-01	.9397	.4582-02	.3133-02	.4210	3.087	570.4
262	90.000	.15000-01	1325.0	.3137	.4163	.4505	.9384	.2497-01	.1739-01	2.491	18.64	562.1
261	90.000	.25000-01	1326.0	.3699	.5188	.5724	.9384	.3172-01	.2050-01	2.517	18.04	582.1
262	90.000	.40000-01	1327.0	.2941	.3936	.4272	.9384	.2369-01	.1630-01	2.274	16.70	565.8
261	90.000	.60000-01	1328.0	.2273	.2981	.3214	.9384	.1781-01	.1260-01	1.868	12.93	556.6
261	90.000	.75000-01	1329.0	.1297	.1683	.1808	.9384	.1002-01	.7189-02	1.105	7.548	551.2
262	90.000	.13230	1479.0	.2711	.3917	.4544	.9345	.2519-01	.1503-01	1.721	12.49	590.8
262	90.000	.13390	1480.0	.2695	.3812	.4374	.9345	.2425-01	.1494-01	1.798	13.08	585.0
262	90.000	.13560	1481.0	.2372	.3240	.3655	.9345	.2026-01	.1315-01	1.731	12.67	573.7
262	90.000	.13730	1482.0	.2326	.3132	.3509	.9345	.1945-01	.1289-01	1.767	12.96	568.3
262	90.000	.13890	1483.0	.1686	.2217	.2457	.9345	.1362-01	.9349-02	1.377	10.15	558.0
262	90.000	.55000	1391.0	.1005	.1311	.1448	.9345	.8025-02	.5573-02	.8420	6.224	554.1
262	90.000	.65000	1392.0	.7920-01	.1023	.1124	.9345	.6234-02	.4391-02	.6860	5.081	549.1
261	90.000	.76500	1394.0	.6850-01	.8940-01	.9880-01	.9345	.5474-02	.3794-02	.5710	4.217	554.4
261	90.000	.77100	1395.0	.7400-01	.9570-01	.1054	.9345	.5839-02	.4100-02	.6360	4.707	549.9
261	90.000	.81500	1396.0	.1670-01	.2110-01	.2310-01	.9345	.1278-02	.9230-03	.1530	1.161	538.8
261	90.000	.83700	1397.0	.1210-01	.1540-01	.1690-01	.9345	.9353-03	.6706-03	.1090	.8130	541.8
261	90.000	.88400	1398.0	.1340-01	.1700-01	.1850-01	.9345	.1026-02	.7450-03	.1260	.9370	536.2
261	90.000	.89400	1399.0	.4290-01	.5330-01	.5770-01	.9345	.3198-02	.2375-02	.4260	3.196	525.4
261	90.000	.90700	1400.0	.1790-01	.2280-01	.2490-01	.9345	.1381-02	.9931-03	.1630	1.215	540.5
261	90.000	.91700	1401.0	.2150-01	.2750-01	.3010-01	.9345	.1667-02	.1191-02	.1930	1.431	543.2
261	90.000	.93200	1402.0	.2680-01	.3460-01	.3800-01	.9345	.2109-02	.1486-02	.2320	1.720	548.6

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN, RIGHT SRB HI/HREF

(RVZR27)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
261	90.000	.93900	1403.0	.3380-01	.4400-01	.4850-01	.9345	.2690-02	.1871-02	.2840	2.098	553.2
262	95.000	.13560	1484.0	.2170	.2942	.3306	.9345	.1833-01	.1203-01	1.619	11.86	570.8
262	95.000	.13730	1485.0	.1952	.2586	.2875	.9345	.1594-01	.1082-01	1.556	11.46	561.5
262	95.000	.13890	1486.0	.1594	.2088	.2310	.9345	.1280-01	.8839-02	1.319	9.732	556.1
262	95.000	.14560	1487.0	.1069	.1385	.1524	.9345	.8451-02	.5929-02	.9180	6.795	550.5
262	95.000	.14730	1488.0	.1067	.1379	.1517	.9345	.8409-02	.5917-02	.9220	6.829	549.5
261	104.00	.10000+00	1330.0	.2919	.4092	.4539	.9377	.2516-01	.1618-01	1.989	14.49	582.0
261	104.00	.12000	1404.0	.2302	.3172	.3592	.9345	.1991-01	.1276-01	1.640	11.98	576.4
261	104.00	.12700	1405.0	.2161	.3044	.3485	.9345	.1932-01	.1197-01	1.455	10.59	583.4
261	104.00	.13400	1406.0	.2042	.2740	.3065	.9345	.1698-01	.1131-01	1.565	11.49	566.6
261	104.00	.14100	1407.0	.1644	.2148	.2373	.9345	.1315-01	.9111-02	1.369	10.11	554.6
261	104.00	.14800	1408.0	.1011	.1303	.1431	.9345	.7928-02	.5602-02	.8820	6.536	547.5
261	104.00	.15500	1409.0	.1094	.1406	.1541	.9345	.8543-02	.6066-02	.9660	7.166	545.7
261	104.00	.16200	1410.0	.1177	.1509	.1653	.9345	.9164-02	.6526-02	1.047	7.771	544.5
261	104.00	.18000	1412.0	.7160-01	.9080-01	.9900-01	.9345	.5487-02	.3967-02	.6610	4.925	538.2
261	104.00	.18600	1413.0	.5940-01	.7520-01	.8200-01	.9345	.4542-02	.3294-02	.5530	4.124	536.9
261	104.00	.19300	1414.0	.6440-01	.8150-01	.8880-01	.9345	.4924-02	.3570-02	.5990	4.465	537.1
261	104.00	.20000	1415.0	.6480-01	.8210-01	.8950-01	.9345	.4961-02	.3592-02	.6010	4.475	537.6
262	112.00	.25000	1416.0	.3640-01	.4580-01	.4980-01	.9345	.2760-02	.2018-02	.3460	2.630	533.3
262	112.00	.13560	1489.0	.1339	.1742	.1922	.9345	.1065-01	.7424-02	1.131	8.361	553.0
262	112.00	.13730	1490.0	.1350	.1750	.1927	.9345	.1068-01	.7487-02	1.156	8.557	550.9
262	112.00	.13890	1491.0	.1222	.1577	.1733	.9345	.9607-02	.6776-02	1.062	7.872	548.5
262	112.00	.14560	1492.0	.3270-01	.4150-01	.4520-01	.9345	.2507-02	.1813-02	.3030	2.254	538.4
261	112.50	.74000	1417.0	.8130-01	.1077	.1198	.9345	.6642-02	.4503-02	.6460	4.753	561.5
261	112.50	.75000	1418.0	.8390-01	.1112	.1237	.9345	.6854-02	.4652-02	.6680	4.921	561.2
262	112.50	.77100	1419.0	.7430-01	.9710-01	.1073	.9345	.5950-02	.4121-02	.6190	4.651	555.0
261	112.50	.92500	1420.0	.2040-01	.2610-01	.2860-01	.9345	.1588-02	.1128-02	.1800	1.337	545.3
261	112.50	.93200	1421.0	.2500-01	.3240-01	.3560-01	.9345	.1973-02	.1388-02	.2160	1.600	549.2
261	112.50	.93900	1422.0	.3200-01	.4170-01	.4600-01	.9345	.2548-02	.1772-02	.2690	1.985	553.3
261	112.50	.95300	1440.0	.1359	.1872	.2061	.9379	.1142-01	.7534-02	.9690	7.084	576.2
262	112.50	.96700	1441.0	.1184	.1624	.1785	.9379	.9894-02	.6565-02	.8550	6.252	575.1
262	112.50	.99400	1443.0	.7130-01	.9780-01	.1075	.9379	.5960-02	.3951-02	.5140	3.755	575.3
261	135.00	.25000-01	1332.0	.2807	.3846	.4249	.9372	.2355-01	.1556-01	2.029	14.84	574.4
262	135.00	.50000-01	1333.0	.2178	.2869	.3123	.9372	.1732-01	.1208-01	1.768	13.03	558.9
261	135.00	.75000-01	1334.0	.1193	.1547	.1674	.9372	.9277-02	.6614-02	1.020	7.678	550.7
261	135.00	.10000+00	1335.0	.1247	.1637	.1780	.9372	.9862-02	.6910-02	1.022	7.540	557.0
261	135.00	.40000	1423.0	.5120-01	.6830-01	.7620-01	.9345	.4225-02	.2839-02	.4000	2.987	564.2
262	135.00	.92500	1424.0	.3660-01	.4740-01	.5220-01	.9345	.2894-02	.2029-02	.3140	2.323	550.7
262	140.00	.13560	1494.0	.5900-01	.7480-01	.8160-01	.9345	.4523-02	.3270-02	.5450	4.060	538.5
262	140.00	.13730	1495.0	.6030-01	.7670-01	.8380-01	.9345	.4644-02	.3344-02	.5520	4.106	540.3
262	140.00	.13890	1496.0	.7150-01	.9140-01	.1001	.9345	.5551-02	.3961-02	.6390	4.747	544.0
262	140.00	.14560	1497.0	.7560-01	.9650-01	.1056	.9345	.5853-02	.4189-02	.6800	5.056	542.8
262	150.00	.14230	1499.0	.6850-01	.8740-01	.9560-01	.9345	.5298-02	.3798-02	.6200	4.608	542.1

IH72, OTS CLEAN, RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
262	180.00	.80000-02	1298.0	.3281	.4503	.4929	.9384	.2733-01	.1819-01	2.364	18.19	575.3
262	180.00	.15000-01	1299.0	.2030	.2636	.2832	.9384	.1570-01	.1126-01	1.728	12.58	551.8
261	180.00	.25000-01	1300.0	.2572	.3468	.3774	.9384	.2091-01	.1425-01	1.945	13.59	568.5
262	180.00	.50000-01	1301.0	.2135	.2800	.3018	.9384	.1673-01	.1184-01	1.758	12.35	556.8
261	180.00	.75000-01	1302.0	.1218	.1576	.1692	.9384	.9375-02	.6752-02	1.048	7.277	549.7
262	180.00	.10000+00	1303.0	.1428	.1876	.2024	.9384	.1122-01	.7915-02	1.168	8.612	557.8
261	225.00	.98000	1425.0	.9160-01	.1278	.1354	.9429	.7506-02	.5079-02	.6330	4.614	580.3
261	263.00	.13600	1336.0	.6620-01	.8390-01	.9120-01	.9349	.5055-02	.3670-02	.6150	4.583	537.3
262	263.00	.20000	1472.0	.9180-01	.1189	.1305	.9349	.7234-02	.5088-02	.7880	5.831	550.5
262	263.00	.30000	1337.0	.9250-01	.1195	.1311	.9349	.7269-02	.5128-02	.7990	6.021	549.4
262	263.00	.40000	1473.0	.8120-01	.1053	.1157	.9349	.6415-02	.4502-02	.6930	5.128	551.3
262	263.00	.50000	1474.0	.7430-01	.9630-01	.1057	.9349	.5862-02	.4117-02	.6350	4.701	551.0
262	263.00	.60000	1475.0	.6010-01	.7730-01	.8460-01	.9349	.4689-02	.3333-02	.5290	3.925	546.5
262	263.00	.75000	1338.0	.5670-01	.7320-01	.8020-01	.9349	.4448-02	.3145-02	.4930	3.654	548.5
262	263.00	.81500	1339.0	.4460-01	.5780-01	.6340-01	.9349	.3514-02	.2475-02	.3840	2.843	550.1
262	263.00	.83700	1340.0	.4670-01	.6050-01	.6640-01	.9349	.3683-02	.2589-02	.4000	2.962	550.7
262	263.00	.88400	1341.0	.4440-01	.5730-01	.6290-01	.9349	.3484-02	.2462-02	.3850	2.854	548.8
262	263.00	.89400	1342.0	.4420-01	.5690-01	.6240-01	.9349	.3460-02	.2448-02	.3840	2.847	548.3
262	263.00	.92800	1477.0	.5120-01	.6630-01	.7280-01	.9349	.4035-02	.2841-02	.4410	3.263	550.1
261	263.00	.93900	1344.0	.5950-01	.7850-01	.8690-01	.9349	.4817-02	.3299-02	.4800	3.541	559.3
262	270.00	.80000-02	1304.0	.2461	.3212	.3259	.9476	.1807-01	.1364-01	2.059	16.30	554.4
262	270.00	.50000-01	1306.0	.2614	.3459	.3513	.9476	.1948-01	.1449-01	2.091	14.66	561.0
261	270.00	.75000-01	1307.0	.1755	.2291	.2325	.9476	.1288-01	.9724-02	1.464	10.30	554.3
262	270.00	.10000+00	1308.0	.2065	.2746	.2790	.9476	.1547-01	.1145-01	1.628	11.97	563.1
261	270.00	.11500	1345.0	.1558	.2102	.2348	.9350	.1301-01	.8635-02	1.176	8.623	568.7
261	277.00	.13600	1346.0	.6910-01	.8770-01	.9530-01	.9352	.5282-02	.3830-02	.6370	4.742	538.6
261	277.00	.30000	1347.0	.9950-01	.1291	.1417	.9352	.7852-02	.5513-02	.8460	6.363	551.5
262	277.00	.40000	1464.0	.8250-01	.1073	.1178	.9352	.6533-02	.4576-02	.6990	5.167	552.6
262	277.00	.60000	1466.0	.8230-01	.1065	.1167	.9352	.6468-02	.4564-02	.7090	5.251	549.9
262	277.00	.70000	1467.0	.7770-01	.1009	.1108	.9352	.6141-02	.4308-02	.6600	4.881	552.1
261	277.00	.75000	1348.0	.7360-01	.9550-01	.1048	.9352	.5807-02	.4079-02	.6260	4.635	551.3
261	277.00	.81500	1349.0	.6840-01	.8960-01	.9870-01	.9352	.5469-02	.3791-02	.5640	4.166	556.0
261	277.00	.83700	1350.0	.6770-01	.8900-01	.9820-01	.9352	.5442-02	.3755-02	.5530	4.082	557.5
261	277.00	.88400	1351.0	.5870-01	.7670-01	.8440-01	.9352	.4676-02	.3254-02	.4890	3.611	554.7
261	277.00	.89400	1352.0	.5720-01	.7470-01	.8220-01	.9352	.4556-02	.3169-02	.4750	3.511	554.9
262	277.00	.90000	1468.0	.5690-01	.7410-01	.8140-01	.9352	.4513-02	.3157-02	.4800	3.550	553.2
262	277.00	.90700	1353.0	.5930-01	.7720-01	.8480-01	.9352	.4700-02	.3290-02	.5020	3.708	552.9
262	277.00	.92100	1469.0	.6020-01	.7840-01	.8600-01	.9352	.4769-02	.3340-02	.5100	3.768	552.7
262	277.00	.92800	1470.0	.6400-01	.8320-01	.9130-01	.9352	.5062-02	.3546-02	.5420	4.004	552.6
262	277.00	.93700	1471.0	.7230-01	.9440-01	.1038	.9352	.5757-02	.4010-02	.6040	4.464	554.6
261	277.00	.93900	1354.0	.7880-01	.1050	.1165	.9352	.6456-02	.4367-02	.6170	4.534	563.7
262	335.00	.11000	1309.0	.2539	.3417	.3424	.9497	.1898-01	.1408-01	1.932	14.17	568.1
261	337.50	.74000	1355.0	.1263	.1676	.1852	.9354	.1027-01	.7000-02	1.002	7.371	561.8

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN, RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
261	337.50	.75000	1356.0	.1507	.2013	.2231	.9354	.1236-01	.8354-02	1.172	8.762	564.6
262	337.50	.76500	1357.0	.1410	.1876	.2076	.9354	.1151-01	.7815-02	1.108	8.289	563.5
262	337.50	.92500	1359.0	.9420-01	.1236	.1359	.9354	.7532-02	.5224-02	.7760	5.728	556.7
262	337.50	.93200	1360.0	.9140-01	.1203	.1326	.9354	.7351-02	.5066-02	.7420	5.469	558.8
262	337.50	.93900	1361.0	.9780-01	.1306	.1448	.9354	.8030-02	.5419-02	.7590	5.378	565.2

RIGHT SRB

PARAMETRIC DATA

ALPHA = .0000 BETA = -5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
251	.0000	-5.000	3.010	37.10	705.0	250.7	.9960	6.314	2335.	.3332-03	.2006-06	3.879
252	.0000	-5.000	3.010	37.10	705.0	250.8	.9940	6.302	2336.	.3324-03	.2006-06	3.870

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
251	.5545-01	.9206-02
252	.5540-01	.9217-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
252	.00000	.80000-02	1310.0	.2582	.3606	.3840	.9423	.2127-01	.1431-01	1.777	13.54	581.1
251	.00000	.25000-01	1311.0	.2381	.3378	.3610	.9423	.2002-01	.1320-01	1.577	11.28	585.6
251	.00000	.76500	1362.0	.8830-01	.1153	.1273	.9345	.7057-02	.4899-02	.7400	5.559	554.0
251	.00000	.83700	1364.0	.6210-01	.8070-01	.8890-01	.9345	.4930-02	.3444-02	.5280	3.902	551.9
251	.00000	.88400	1365.0	.6640-01	.8600-01	.9470-01	.9345	.5251-02	.3683-02	.5700	4.216	550.4
251	.00000	.90700	1366.0	.5590-01	.7270-01	.8010-01	.9345	.4444-02	.3100-02	.4730	3.500	552.4
251	5.0000	.75000-01	1313.0	.1164	.1530	.1604	.9427	.8894-02	.6455-02	.9500	6.782	557.8
251	5.0000	.11000	1314.0	.5490-01	.7010-01	.7310-01	.9427	.4052-02	.3046-02	.4950	3.681	542.5
251	20.000	.75000-01	1316.0	.1207	.1604	.1670	.9440	.9262-02	.6696-02	.9550	6.797	562.5
251	20.000	.10000+00	1318.0	.1422	.1923	.2009	.9440	.1114-01	.7884-02	1.066	7.812	569.9
251	20.000	.11000	1319.0	.1524	.2075	.2169	.9440	.1203-01	.8450-02	1.122	8.215	572.3
252	22.500	.72400	1367.0	.6300-01	.8120-01	.8910-01	.9346	.4938-02	.3492-02	.5500	4.148	547.7
251	22.500	.74000	1368.0	.7000-01	.9030-01	.9910-01	.9346	.5497-02	.3880-02	.6090	4.511	548.2
251	22.500	.75000	1369.0	.7330-01	.9440-01	.1037	.9346	.5751-02	.4062-02	.6380	4.729	548.0
252	22.500	.76500	1370.0	.8730-01	.1125	.1235	.9346	.6840-02	.4839-02	.7640	5.756	547.5
252	22.500	.77100	1371.0	.8350-01	.1077	.1183	.9346	.6553-02	.4626-02	.7260	5.379	548.4
251	22.500	.92500	1372.0	.3860-01	.5020-01	.5520-01	.9346	.3063-02	.2143-02	.3290	2.435	551.5
251	22.500	.93900	1374.0	.4830-01	.6330-01	.7000-01	.9346	.3883-02	.2677-02	.3980	2.935	556.5
251	24.400	.95300	1433.0	.7840-01	.1098	.1143	.9450	.6340-02	.4348-02	.5360	3.908	581.7
251	35.000	.75000-01	1321.0	.1197	.1586	.1637	.9452	.9077-02	.6638-02	.9550	6.802	561.2

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN, RIGHT SRB HI/HREF

(RVZR28)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
251	35.000	.11000	1322.0	.1434	.1961	.2034	.9452	.1128-01	.7953-02	1.043	7.760	573.9
251	35.600	.95300	1434.0	.7240-01	.1005	.1037	.9459	.5753-02	.4013-02	.5060	3.689	579.0
251	40.000	.95300	1435.0	.7200-01	.9960-01	.1025	.9463	.5686-02	.3993-02	.5080	3.707	577.9
251	45.000	.74000	1375.0	.6390-01	.8220-01	.9000-01	.9347	.4993-02	.3543-02	.5610	4.232	546.7
252	45.000	.75000	1376.0	.6200-01	.7960-01	.8720-01	.9347	.4836-02	.3438-02	.5470	4.127	545.9
252	45.000	.76500	1377.0	.6300-01	.8080-01	.8840-01	.9347	.4899-02	.3492-02	.5600	4.153	545.1
252	45.000	.77100	1378.0	.6590-01	.8460-01	.9260-01	.9347	.5128-02	.3650-02	.5830	4.328	545.5
252	45.000	.88400	1381.0	.2990-01	.3820-01	.4180-01	.9347	.2316-02	.1656-02	.2670	1.985	543.9
252	45.000	.90700	1382.0	.2710-01	.3480-01	.3810-01	.9347	.2113-02	.1502-02	.2390	1.775	546.0
251	65.000	.11000	1323.0	.1674	.2479	.2552	.9470	.1415-01	.9281-02	1.007	7.164	596.6
251	67.500	.74000	1383.0	.7080-01	.9120-01	.9990-01	.9349	.5542-02	.3924-02	.6170	4.648	547.9
251	67.500	.75000	1384.0	.6910-01	.8960-01	.9840-01	.9349	.5455-02	.3832-02	.5910	4.448	550.8
252	67.500	.77100	1385.0	.6200-01	.8010-01	.8780-01	.9349	.4866-02	.3437-02	.5370	3.980	549.0
251	76.000	.10000+00	1324.0	.1400	.2057	.2108	.9474	.1169-01	.7765-02	.8580	6.210	594.6
251	76.000	.14100	1386.0	.1295	.1711	.1894	.9350	.1050-01	.7179-02	1.040	7.661	560.2
251	76.000	.14800	1387.0	.1066	.1384	.1520	.9350	.8432-02	.5913-02	.9080	6.714	551.6
251	76.000	.15500	1388.0	.9000-01	.1157	.1265	.9350	.7017-02	.4992-02	.7930	5.885	546.1
251	76.000	.16200	1389.0	.7640-01	.9770-01	.1066	.9350	.5910-02	.4236-02	.6860	5.095	543.2
251	76.000	.25000	1390.0	.2470-01	.3150-01	.3440-01	.9350	.1905-02	.1371-02	.2240	1.696	541.5
251	77.500	.95300	1436.0	.7020-01	.9380-01	.9500-01	.9482	.5266-02	.3895-02	.5460	4.011	564.9
251	77.500	.96700	1437.0	.9250-01	.1235	.1250	.9482	.6931-02	.5129-02	.7200	5.293	564.6
251	77.500	.96400	1439.0	.9630-01	.1292	.1308	.9482	.7252-02	.5339-02	.7390	5.425	566.7
252	90.000	.15000-01	1325.0	.2719	.3758	.3828	.9476	.2121-01	.1506-01	1.922	14.27	577.7
251	90.000	.25000-01	1326.0	.2805	.4064	.4154	.9476	.2304-01	.1555-01	1.769	12.62	591.3
252	90.000	.40000-01	1327.0	.2387	.3269	.3328	.9476	.1844-01	.1323-01	1.729	12.65	574.5
251	90.000	.60000-01	1328.0	.1734	.2301	.2338	.9476	.1296-01	.9618-02	1.377	9.501	561.9
251	90.000	.75000-01	1329.0	.1021	.1320	.1338	.9476	.7422-02	.5664-02	.8840	6.044	549.0
252	90.000	.13230	1479.0	.2149	.3209	.3766	.9350	.2086-01	.1191-01	1.272	9.191	598.5
252	90.000	.13390	1480.0	.1996	.2803	.3190	.9350	.1767-01	.1106-01	1.355	9.871	582.8
252	90.000	.13560	1481.0	.1735	.2335	.2604	.9350	.1443-01	.9614-02	1.321	9.692	567.9
252	90.000	.13730	1482.0	.1463	.1947	.2162	.9350	.1198-01	.8106-02	1.150	8.455	563.5
252	90.000	.13890	1483.0	.1277	.1677	.1851	.9350	.1026-01	.7075-02	1.045	7.711	557.5
252	90.000	.55000	1391.0	.8010-01	.1037	.1137	.9350	.6300-02	.4435-02	.6870	5.084	550.5
252	90.000	.65000	1392.0	.7620-01	.9830-01	.1077	.9350	.5967-02	.4224-02	.6630	4.913	548.3
251	90.000	.74000	1393.0	.1320-01	.1680-01	.1830-01	.9350	.1017-02	.7316-03	.1190	.9030	541.8
251	90.000	.76500	1394.0	.6370-01	.8340-01	.9180-01	.9350	.5092-02	.3535-02	.5300	3.910	555.2
251	90.000	.77100	1395.0	.5630-01	.7360-01	.8100-01	.9350	.4493-02	.3123-02	.4690	3.465	554.8
251	90.000	.81500	1396.0	.8600-02	.1110-01	.1210-01	.9350	.6730-03	.4753-03	.7400-01	.5580	549.1
251	90.000	.83700	1397.0	.3760-01	.4860-01	.5320-01	.9350	.2952-02	.2087-02	.3260	2.416	548.8
251	90.000	.88400	1398.0	.2990-01	.3810-01	.4150-01	.9350	.2301-02	.1656-02	.2710	2.015	541.5
251	90.000	.89400	1399.0	.4260-01	.5330-01	.5770-01	.9350	.3197-02	.2365-02	.4160	3.115	529.0
251	90.000	.90700	1400.0	.2490-01	.3190-01	.3480-01	.9350	.1931-02	.1381-02	.2220	1.648	544.3
251	90.000	.91700	1401.0	.2720-01	.3490-01	.3810-01	.9350	.2115-02	.1506-02	.2390	1.776	546.0

IH72, OTS CLEAN, RIGHT SRB HI/HREF (RVZR28)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
251	90.000	.93200	1402.0	.4490-01	.5810-01	.6370-01	.9350	.3534-02	.2490-02	.3860	2.860	549.9
251	90.000	.93900	1403.0	.4960-01	.6450-01	.7090-01	.9350	.3932-02	.2748-02	.4180	3.092	552.9
252	95.000	.13560	1484.0	.1731	.2328	.2598	.9350	.1439-01	.9589-02	1.317	9.666	567.9
252	95.000	.13730	1485.0	.1514	.1997	.2208	.9350	.1224-01	.8390-02	1.224	9.019	559.4
252	95.000	.13890	1486.0	.1326	.1739	.1918	.9350	.1063-01	.7348-02	1.092	8.059	556.7
252	95.000	.14560	1487.0	.1074	.1386	.1519	.9350	.8415-02	.5949-02	.9310	6.894	548.9
252	95.000	.14730	1488.0	.9540-01	.1221	.1333	.9350	.7385-02	.5284-02	.8520	6.325	544.1
251	104.00	.10000+00	1330.0	.1229	.1838	.1887	.9474	.1046-01	.6815-02	.7250	5.236	598.7
251	104.00	.12000	1404.0	.1997	.2805	.3194	.9350	.1771-01	.1107-01	1.354	9.860	582.8
251	104.00	.12700	1405.0	.2034	.3083	.3649	.9350	.2023-01	.1128-01	1.168	8.432	601.5
251	104.00	.13400	1406.0	.1630	.2172	.2413	.9350	.1338-01	.9038-02	1.277	9.390	563.8
251	104.00	.14100	1407.0	.1389	.1812	.1994	.9350	.1106-01	.7704-02	1.165	8.609	553.8
251	104.00	.14800	1408.0	.9970-01	.1281	.1401	.9350	.7769-02	.5528-02	.8790	6.518	546.1
251	104.00	.15500	1409.0	.9000-01	.1148	.1251	.9350	.6938-02	.4991-02	.8150	6.063	541.7
251	104.00	.16200	1410.0	.7930-01	.1008	.1098	.9350	.6089-02	.4397-02	.7260	5.399	540.0
251	104.00	.18000	1412.0	.5570-01	.7070-01	.7700-01	.9350	.4269-02	.3087-02	.5110	3.805	539.5
251	104.00	.18600	1413.0	.5070-01	.6430-01	.7000-01	.9350	.3883-02	.2809-02	.4660	3.466	539.3
251	104.00	.19300	1414.0	.4400-01	.5590-01	.6080-01	.9350	.3373-02	.2440-02	.4050	3.013	539.2
251	104.00	.20000	1415.0	.3960-01	.5040-01	.5490-01	.9350	.3043-02	.2199-02	.3630	2.704	539.8
251	104.00	.25000	1416.0	.4110-01	.5200-01	.5650-01	.9350	.3133-02	.2277-02	.3820	2.894	537.3
252	112.00	.13560	1489.0	.1299	.1713	.1895	.9349	.1050-01	.7196-02	1.049	7.733	559.5
252	112.00	.13730	1490.0	.1181	.1548	.1708	.9349	.9461-02	.6544-02	.9740	7.187	556.5
252	112.00	.13890	1491.0	.1116	.1451	.1595	.9349	.8836-02	.6181-02	.9440	6.982	552.6
252	112.00	.14560	1492.0	.3240-01	.4130-01	.4510-01	.9349	.2497-02	.1796-02	.2930	2.181	541.9
251	112.50	.74000	1417.0	.4890-01	.6350-01	.6970-01	.9349	.3867-02	.2712-02	.4170	3.082	551.5
251	112.50	.75000	1418.0	.4930-01	.6400-01	.7030-01	.9349	.3901-02	.2733-02	.4190	3.098	551.8
252	112.50	.77100	1419.0	.4470-01	.5780-01	.6330-01	.9349	.3508-02	.2477-02	.3870	2.913	549.2
251	112.50	.92500	1420.0	.3510-01	.4530-01	.4960-01	.9349	.2750-02	.1947-02	.3060	2.269	547.8
251	112.50	.93200	1421.0	.3980-01	.5150-01	.5660-01	.9349	.3137-02	.2206-02	.3410	2.523	550.5
251	112.50	.93900	1422.0	.3990-01	.5200-01	.5730-01	.9349	.3177-02	.2213-02	.3350	2.474	553.8
251	112.50	.95300	1440.0	.4300-01	.5730-01	.5820-01	.9479	.3225-02	.2385-02	.3360	2.472	564.1
252	112.50	.96700	1441.0	.6720-01	.8910-01	.9040-01	.9479	.5007-02	.3721-02	.5320	3.918	562.2
252	112.50	.99400	1443.0	.8230-01	.1088	.1102	.9479	.6108-02	.4559-02	.6610	4.866	560.4
251	135.00	.25000-01	1332.0	.2377	.3379	.3500	.9459	.1941-01	.1318-01	1.568	11.40	586.1
252	135.00	.50000-01	1333.0	.2061	.2779	.2861	.9459	.1585-01	.1142-01	1.560	11.44	568.7
251	135.00	.75000-01	1334.0	.1138	.1488	.1526	.9459	.8464-02	.6309-02	.9450	7.099	555.2
251	135.00	.10000+00	1335.0	.1213	.1628	.1675	.9459	.9286-02	.6725-02	.9300	6.829	566.7
251	135.00	.40000	1423.0	.8910-01	.1178	.1306	.9347	.7244-02	.4941-02	.7150	5.356	560.3
252	140.00	.13560	1494.0	.7310-01	.9450-01	.1037	.9347	.5746-02	.4052-02	.6330	4.692	549.0
252	140.00	.13730	1495.0	.7300-01	.9440-01	.1036	.9347	.5741-02	.4044-02	.6300	4.667	549.5
252	140.00	.13890	1496.0	.7860-01	.1018	.1119	.9347	.6198-02	.4356-02	.6750	4.996	550.3
252	140.00	.14560	1497.0	.7780-01	.1004	.1102	.9347	.6106-02	.4310-02	.6750	5.000	548.7
252	150.00	.14230	1499.0	.7510-01	.9680-01	.1063	.9346	.5888-02	.4163-02	.6550	4.856	547.9

IH72, OTS CLEAN, RIGHT SRB HI/HREF (RVZR28)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
252	180.00	.80000-02	1298.0	.2826	.4128	.4441	.9423	.2461-01	.1566-01	1.751	13.35	593.5
252	180.00	.15000-01	1299.0	.2252	.3016	.3182	.9423	.1763-01	.1248-01	1.738	12.55	566.0
251	180.00	.25000-01	1300.0	.2302	.3220	.3429	.9423	.1902-01	.1277-01	1.580	10.97	581.3
252	180.00	.50000-01	1301.0	.1980	.2646	.2790	.9423	.1546-01	.1097-01	1.538	10.76	565.2
251	180.00	.75000-01	1302.0	.1243	.1632	.1714	.9423	.9505-02	.6893-02	1.020	7.051	557.1
252	180.00	.10000+00	1303.0	.1467	.1966	.2075	.9423	.1149-01	.8128-02	1.129	8.287	566.5
251	225.00	.98000	1425.0	.1492	.2114	.2307	.9400	.1279-01	.8273-02	.9910	7.208	585.3
251	263.00	.13600	1336.0	.3790-01	.4780-01	.5200-01	.9345	.2881-02	.2101-02	.3590	2.676	534.4
252	263.00	.20000	1472.0	.5190-01	.6630-01	.7260-01	.9345	.4020-02	.2874-02	.4650	3.458	543.3
252	263.00	.30000	1337.0	.6060-01	.7750-01	.8490-01	.9345	.4702-02	.3355-02	.5410	4.088	544.0
252	263.00	.40000	1473.0	.5460-01	.7070-01	.7780-01	.9345	.4312-02	.3023-02	.4670	3.458	550.8
252	263.00	.50000	1474.0	.5970-01	.7770-01	.8570-01	.9345	.4748-02	.3308-02	.5040	3.724	553.0
252	263.00	.60000	1475.0	.6950-01	.9030-01	.9950-01	.9345	.5514-02	.3853-02	.5910	4.370	552.0
252	263.00	.75000	1338.0	.6900-01	.8910-01	.9790-01	.9345	.5425-02	.3821-02	.5970	4.422	549.1
252	263.00	.81500	1339.0	.6680-01	.8630-01	.9500-01	.9345	.5261-02	.3701-02	.5770	4.270	549.5
252	263.00	.83700	1340.0	.7070-01	.9150-01	.1006	.9345	.5576-02	.3917-02	.6080	4.501	550.1
252	263.00	.88400	1341.0	.6860-01	.8880-01	.9770-01	.9345	.5414-02	.3799-02	.5880	4.353	550.5
252	263.00	.89400	1342.0	.6610-01	.8530-01	.9380-01	.9345	.5198-02	.3661-02	.5720	4.236	549.1
252	263.00	.92800	1477.0	.7380-01	.9600-01	.1059	.9345	.5865-02	.4089-02	.6240	4.610	552.8
251	263.00	.93900	1344.0	.9160-01	.1211	.1346	.9345	.7463-02	.5078-02	.7340	5.403	560.6
252	270.00	.80000-02	1304.0	.1931	.2561	.2769	.9385	.1534-01	.1070-01	1.535	12.10	561.9
252	270.00	.50000-01	1306.0	.1825	.2417	.2612	.9385	.1447-01	.1011-01	1.456	10.21	561.3
251	270.00	.75000-01	1307.0	.1102	.1435	.1542	.9385	.8552-02	.6112-02	.9290	6.540	553.1
252	270.00	.10000+00	1308.0	.1254	.1651	.1780	.9385	.9862-02	.6950-02	1.021	7.528	558.4
251	270.00	.11500	1345.0	.9790-01	.1305	.1455	.9345	.8070-02	.5430-02	.7660	5.634	563.9
251	277.00	.13600	1346.0	.3580-01	.4530-01	.4930-01	.9345	.2737-02	.1986-02	.3340	2.493	536.6
251	277.00	.30000	1347.0	.6080-01	.7850-01	.8630-01	.9345	.4786-02	.3370-02	.5260	3.962	549.0
252	277.00	.40000	1464.0	.5440-01	.7030-01	.7730-01	.9345	.4281-02	.3015-02	.4710	3.486	549.2
252	277.00	.60000	1466.0	.7960-01	.1035	.1140	.9345	.6318-02	.4413-02	.6760	5.000	552.1
252	277.00	.70000	1467.0	.6020-01	.7820-01	.8620-01	.9345	.4777-02	.3336-02	.5110	3.779	552.1
251	277.00	.75000	1348.0	.5780-01	.7530-01	.8320-01	.9345	.4612-02	.3204-02	.4850	3.583	553.7
251	277.00	.81500	1349.0	.6920-01	.9080-01	.1005	.9345	.5572-02	.3838-02	.5700	4.203	556.7
251	277.00	.83700	1350.0	.6300-01	.8290-01	.9200-01	.9345	.5101-02	.3492-02	.5110	3.767	558.7
251	277.00	.88400	1351.0	.5920-01	.7710-01	.8510-01	.9345	.4721-02	.3283-02	.4970	3.676	553.5
251	277.00	.89400	1352.0	.6040-01	.7880-01	.8700-01	.9345	.4827-02	.3348-02	.5050	3.729	554.3
252	277.00	.90000	1468.0	.6200-01	.8050-01	.8860-01	.9345	.4911-02	.3435-02	.5280	3.906	551.6
252	277.00	.90700	1353.0	.6180-01	.8010-01	.8830-01	.9345	.4889-02	.3423-02	.5270	3.900	551.3
252	277.00	.92100	1469.0	.6650-01	.8630-01	.9510-01	.9345	.5267-02	.3686-02	.5670	4.195	551.5
252	277.00	.92800	1470.0	.6980-01	.9080-01	.1001	.9345	.5547-02	.3868-02	.5910	4.366	552.7
252	277.00	.93700	1471.0	.7000-01	.9130-01	.1008	.9345	.5582-02	.3878-02	.5870	4.334	554.0
251	277.00	.93900	1354.0	.8070-01	.1077	.1201	.9345	.6660-02	.4476-02	.6300	4.633	564.2
252	335.00	.11000	1309.0	.1600	.2147	.2296	.9405	.1272-01	.8866-02	1.227	9.006	566.9
251	337.50	.74000	1355.0	.7180-01	.9330-01	.1028	.9345	.5701-02	.3982-02	.6100	4.511	551.9

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN, RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
251	337.50	.75000	1356.0	.8620-01	.1121	.1235	.9345	.6850-02	.4782-02	.7310	5.501	552.1
252	337.50	.76500	1357.0	.8700-01	.1133	.1250	.9345	.6927-02	.4822-02	.7330	5.511	553.3
252	337.50	.92500	1359.0	.6140-01	.7970-01	.8780-01	.9345	.4864-02	.3402-02	.5230	3.869	551.6
252	337.50	.93200	1360.0	.6430-01	.8370-01	.9230-01	.9345	.5115-02	.3560-02	.5410	3.999	553.3
252	337.50	.93900	1361.0	.7270-01	.9550-01	.1058	.9345	.5861-02	.4031-02	.5960	4.398	557.4

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
247	-.1000+00	.0000	3.010	37.10	705.0	250.6	.9950	6.310	2335.	.3331-03	.2005-06	3.879
248	-.1000+00	.0000	3.010	37.10	705.0	250.6	.9960	6.314	2335.	.3334-03	.2004-06	3.883

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
247	.5543-01	.9207-02
248	.5545-01	.9202-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
248	.00000	.80000-02	1310.0	.3174	.4207	.4423	.9425	.2452-01	.1760-01	2.526	19.44	561.0
247	.00000	.25000-01	1311.0	.3052	.4141	.4375	.9425	.2425-01	.1692-01	2.266	16.33	570.8
247	.00000	.76500	1362.0	.1011	.1353	.1511	.9345	.8375-02	.5607-02	.7830	5.852	565.1
247	.00000	.83700	1364.0	.5910-01	.7830-01	.8710-01	.9345	.4830-02	.3276-02	.4700	3.459	561.3
247	.00000	.88400	1365.0	.8120-01	.1071	.1188	.9345	.6584-02	.4502-02	.6570	4.844	558.8
247	.00000	.90700	1366.0	.6710-01	.8890-01	.9890-01	.9345	.5480-02	.3718-02	.5340	3.931	561.1
247	5.0000	.75000-01	1313.0	.1516	.1942	.2027	.9425	.1124-01	.8403-02	1.350	9.703	544.1
247	5.0000	.11000	1314.0	.7220-01	.9140-01	.9530-01	.9425	.5280-02	.4003-02	.6710	5.000	537.2
247	20.000	.75000-01	1316.0	.1520	.1961	.2050	.9425	.1136-01	.8425-02	1.321	9.471	548.0
247	20.000	.10000+00	1318.0	.1772	.2306	.2415	.9425	.1339-01	.9825-02	1.497	11.07	552.4
247	20.000	.11000	1319.0	.1814	.2360	.2472	.9425	.1370-01	.1005-01	1.530	11.31	552.6
248	22.500	.72400	1367.0	.9250-01	.1207	.1333	.9345	.7393-02	.5129-02	.7730	5.809	553.9
247	22.500	.74000	1368.0	.9700-01	.1268	.1402	.9345	.7771-02	.5377-02	.8060	5.949	554.9
247	22.500	.75000	1369.0	.9340-01	.1223	.1354	.9345	.7504-02	.5176-02	.7700	5.686	555.9
248	22.500	.76500	1370.0	.1081	.1415	.1564	.9345	.8675-02	.5992-02	.8940	6.716	555.3
248	22.500	.77100	1371.0	.1055	.1382	.1530	.9345	.8482-02	.5850-02	.8700	6.421	555.9
247	22.500	.92500	1372.0	.5350-01	.6950-01	.7660-01	.9345	.4248-02	.2965-02	.4530	3.353	551.9
247	22.500	.93900	1374.0	.6460-01	.8460-01	.9350-01	.9345	.5185-02	.3584-02	.5360	3.956	555.3
247	24.400	.95300	1433.0	.1105	.1528	.1613	.9431	.8942-02	.6127-02	.7800	5.700	577.4
247	35.000	.75000-01	1321.0	.1599	.2058	.2151	.9425	.1192-01	.8865-02	1.402	10.06	546.6

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
247	35.000	.11000	1322.0	.1649	.2144	.2245	.9425	.1245-01	.9138-02	1.394	10.48	552.2
247	35.600	.95300	1434.0	.1053	.1438	.1514	.9431	.8392-02	.5839-02	.7700	5.633	572.9
247	40.000	.95300	1435.0	.1030	.1400	.1473	.9431	.8166-02	.5708-02	.7610	5.570	571.5
247	45.000	.74000	1375.0	.8900-01	.1162	.1284	.9345	.7118-02	.4933-02	.7420	5.573	554.4
247	45.000	.75000	1376.0	.8920-01	.1164	.1285	.9345	.7124-02	.4945-02	.7460	5.608	553.8
248	45.000	.76500	1377.0	.8740-01	.1139	.1257	.9345	.6970-02	.4848-02	.7350	5.433	553.0
248	45.000	.77100	1378.0	.8540-01	.1111	.1226	.9345	.6798-02	.4735-02	.7200	5.325	552.5
248	45.000	.88400	1381.0	.4710-01	.6000-01	.6560-01	.9345	.3638-02	.2614-02	.4280	3.187	540.6
248	45.000	.90700	1382.0	.3980-01	.5080-01	.5560-01	.9345	.3083-02	.2208-02	.3590	2.669	541.9
247	65.000	.11000	1323.0	.2560	.3444	.3634	.9424	.2014-01	.1419-01	1.948	14.06	567.5
247	67.500	.74000	1383.0	.9180-01	.1192	.1313	.9345	.7279-02	.5088-02	.7800	5.869	551.4
247	67.500	.75000	1384.0	.8830-01	.1151	.1271	.9345	.7046-02	.4895-02	.7400	5.564	553.5
248	67.500	.77100	1385.0	.8610-01	.1114	.1225	.9345	.6792-02	.4776-02	.7420	5.499	549.1
247	76.000	.10000+00	1324.0	.2436	.3305	.3494	.9424	.1937-01	.1351-01	1.810	13.27	570.7
247	76.000	.14100	1386.0	.1542	.2017	.2230	.9345	.1236-01	.8545-02	1.277	9.432	555.3
247	76.000	.14800	1387.0	.1294	.1673	.1840	.9345	.1020-01	.7173-02	1.116	8.264	549.2
247	76.000	.15500	1388.0	.1102	.1421	.1561	.9345	.8652-02	.6107-02	.9580	7.103	547.8
247	76.000	.16200	1389.0	.9380-01	.1198	.1311	.9345	.7267-02	.5198-02	.8430	6.263	542.6
247	76.000	.25000	1390.0	.3060-01	.3790-01	.4100-01	.9345	.2271-02	.1698-02	.3110	2.373	521.8
247	77.500	.95300	1436.0	.8230-01	.1105	.1160	.9430	.6433-02	.4564-02	.6310	4.631	566.6
247	77.500	.96700	1437.0	.1068	.1428	.1498	.9430	.8305-02	.5918-02	.8260	6.071	565.1
247	77.500	.99400	1439.0	.8420-01	.1119	.1172	.9430	.6499-02	.4665-02	.6640	4.882	562.5
248	90.000	.15000-01	1325.0	.2831	.3795	.4002	.9424	.2219-01	.1570-01	2.178	16.27	565.8
247	90.000	.25000-01	1326.0	.3379	.4753	.5066	.9424	.2808-01	.1873-01	2.283	16.36	582.8
248	90.000	.40000-01	1327.0	.2677	.3577	.3769	.9424	.2090-01	.1484-01	2.079	15.28	564.5
247	90.000	.60000-01	1328.0	.2070	.2716	.2852	.9424	.1581-01	.1148-01	1.700	11.76	556.6
247	90.000	.75000 01	1329.0	.1124	.1448	.1514	.9424	.8395-02	.6230-02	.9800	6.709	547.4
248	90.000	.13230	1479.0	.2417	.3508	.4079	.9345	.2262-01	.1340-01	1.518	11.01	591.3
248	90.000	.13390	1480.0	.2074	.2916	.3336	.9345	.1850-01	.1150-01	1.402	10.21	582.6
248	90.000	.13560	1481.0	.1748	.2364	.2654	.9345	.1472-01	.9694-02	1.311	9.610	569.4
248	90.000	.13730	1482.0	.1455	.1940	.2163	.9345	.1199-01	.8067-02	1.137	8.358	563.7
248	90.000	.13890	1483.0	.1520	.1998	.2214	.9345	.1228-01	.8428-02	1.241	9.151	557.4
248	90.000	.55000	1391.0	.9280-01	.1204	.1326	.9345	.7353-02	.5145-02	.7910	5.852	550.9
248	90.000	.65000	1392.0	.5950-01	.9020-01	.9930-01	.9345	.5504-02	.3856-02	.5940	4.399	550.5
247	90.000	.74000	1393.0	.1260-01	.1610-01	.1760-01	.9345	.9740-03	.7009-03	.1150	.8730	540.1
247	90.000	.76500	1394.0	.7810-01	.1019	.1125	.9345	.6236-02	.4331-02	.6540	4.836	553.7
247	90.000	.77100	1395.0	.8060-01	.1043	.1148	.9345	.6363-02	.4471-02	.6940	5.138	549.6
247	90.000	.81500	1396.0	.4000-01	.5100-01	.5580-01	.9345	.3091-02	.2218-02	.3620	2.740	541.4
247	90.000	.83700	1397.0	.5260-01	.6690-01	.7300-01	.9345	.4049-02	.2916-02	.4810	3.582	539.7
247	90.000	.88400	1398.0	.3360-01	.4220-01	.4590-01	.9345	.2543-02	.1861-02	.3200	2.390	532.8
247	90.000	.89400	1399.0	.4810-01	.5950-01	.6430-01	.9345	.3564-02	.2666-02	.4880	3.667	521.6
247	90.000	.90700	1400.0	.4040-01	.5120-01	.5580-01	.9345	.3095-02	.2242-02	.3750	2.797	537.3
247	90.000	.91700	1401.0	.4160-01	.5280-01	.5760-01	.9345	.3193-02	.2303-02	.3820	2.841	539.1

IH72, OTS CLEAN, RIGHT SRB HI/HREF

(RVZR29)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
247	90.000	.93200	1402.0	.3700-01	.4730-01	.5180-01	.9345	.2869-02	.2048-02	.3310	2.455	543.4
247	90.000	.93900	1403.0	.4100-01	.5310-01	.5840-01	.9345	.3238-02	.2275-02	.3530	2.615	549.5
248	95.000	.13560	1484.0	.1611	.2207	.2493	.9345	.1382-01	.8932-02	1.165	8.521	574.1
248	95.000	.13730	1485.0	.1453	.1945	.2172	.9345	.1205-01	.8056-02	1.123	8.248	565.2
248	95.000	.13890	1486.0	.1398	.1851	.2058	.9345	.1141-01	.7749-02	1.115	8.209	560.7
248	95.000	.14560	1487.0	.1273	.1679	.1863	.9345	.1033-01	.7057-02	1.027	7.572	559.0
248	95.000	.14730	1488.0	.1107	.1452	.1607	.9345	.8908-02	.6139-02	.9110	6.727	556.1
247	104.00	.10000+00	1330.0	.2426	.3376	.3591	.9424	.1990-01	.1345-01	1.684	12.28	579.6
247	104.00	.12000	1404.0	.2038	.2874	.3293	.9345	.1825-01	.1130-01	1.368	9.962	583.6
247	104.00	.12700	1405.0	.2464	.3542	.4098	.9345	.2272-01	.1366-01	1.581	11.48	589.0
247	104.00	.13400	1406.0	.1587	.2162	.2436	.9345	.1350-01	.8799-02	1.166	8.537	572.2
247	104.00	.14100	1407.0	.1372	.1824	.2031	.9345	.1126-01	.7605-02	1.082	7.959	562.5
247	104.00	.14800	1408.0	.1192	.1567	.1736	.9345	.9622-02	.6606-02	.9730	7.176	557.5
247	104.00	.15500	1409.0	.1037	.1353	.1494	.9345	.8284-02	.5748-02	.8670	6.404	554.0
247	104.00	.16200	1410.0	.9160-01	.1187	.1307	.9345	.7248-02	.5079-02	.7830	5.798	550.5
247	104.00	.18000	1412.0	.6940-01	.8930-01	.9800-01	.9345	.5434-02	.3845-02	.6070	4.502	546.9
247	104.00	.18600	1413.0	.5990-01	.7700-01	.8450-01	.9345	.4682-02	.3322-02	.5280	3.915	545.9
247	104.00	.19300	1414.0	.5440-01	.6970-01	.7630-01	.9345	.4230-02	.3016-02	.4850	3.601	544.0
247	104.00	.20000	1415.0	.5050-01	.6460-01	.7070-01	.9345	.3919-02	.2799-02	.4520	3.359	543.2
247	104.00	.25000	1416.0	.3030-01	.3820-01	.4160-01	.9345	.2305-02	.1678-02	.2850	2.161	535.0
248	112.00	.13560	1489.0	.1274	.1694	.1887	.9345	.1046-01	.7066-02	1.004	7.386	562.5
248	112.00	.13730	1490.0	.1200	.1598	.1780	.9345	.9871-02	.6655-02	.9430	6.936	562.9
248	112.00	.13890	1491.0	.1141	.1512	.1681	.9345	.9322-02	.6329-02	.9100	6.700	560.8
248	112.00	.14560	1492.0	.3280-01	.4170-01	.4550-01	.9345	.2525-02	.1817-02	.2990	2.227	539.9
247	112.50	.74000	1417.0	.5460-01	.7230-01	.8030-01	.9345	.4453-02	.3028-02	.4370	3.216	560.5
247	112.50	.75000	1418.0	.4950-01	.6560-01	.7290-01	.9345	.4040-02	.2745-02	.3950	2.910	560.8
248	112.50	.77100	1419.0	.4720-01	.6180-01	.6840-01	.9345	.3794-02	.2616-02	.3880	2.916	556.0
247	112.50	.92500	1420.0	.4210-01	.5360-01	.5860-01	.9345	.3247-02	.2336-02	.3840	2.861	540.2
247	112.50	.93200	1421.0	.4780-01	.6130-01	.6710-01	.9345	.3720-02	.2651-02	.4260	3.164	544.1
247	112.50	.93900	1422.0	.5100-01	.6590-01	.7250-01	.9345	.4019-02	.2826-02	.4390	3.255	549.2
247	112.50	.95300	1440.0	.1107	.1491	.1566	.9430	.8683-02	.6139-02	.8420	6.178	567.6
248	112.50	.96700	1441.0	.1084	.1468	.1545	.9430	.8567-02	.6013-02	.8100	5.940	569.8
248	112.50	.99400	1443.0	.7070-01	.9570-01	.1006	.9430	.5580-02	.3923-02	.5310	3.891	569.3
247	135.00	.25000-01	1332.0	.2811	.3967	.4234	.9423	.2347-01	.1558-01	1.884	13.71	583.8
248	135.00	.50000-01	1333.0	.2267	.3059	.3232	.9423	.1792-01	.1257-01	1.710	12.54	568.5
247	135.00	.75000-01	1334.0	.1184	.1557	.1636	.9423	.9067-02	.6561-02	.9650	7.235	557.7
247	135.00	.10000+00	1335.0	.1316	.1755	.1849	.9423	.1025-01	.7293-02	1.027	7.551	563.9
247	135.00	.40000	1423.0	.8680-01	.1149	.1277	.9345	.7080-02	.4812-02	.6930	5.192	560.7
248	135.00	.92500	1424.0	.4170-01	.5370-01	.5900-01	.9345	.3271-02	.2312-02	.3640	2.698	547.2
248	140.00	.13560	1494.0	.7090-01	.9110-01	.9990-01	.9345	.5538-02	.3931-02	.6250	4.637	545.6
248	140.00	.13730	1495.0	.7100-01	.9170-01	.1007	.9345	.5585-02	.3939-02	.6170	4.570	548.0
248	140.00	.13890	1496.0	.8010-01	.1039	.1145	.9345	.6347-02	.4440-02	.6820	5.048	550.9
248	140.00	.14560	1497.0	.8300-01	.1076	.1185	.9345	.6570-02	.4600-02	.7080	5.238	550.7

IH72, OTS CLEAN, RIGHT SRB HI/HREF (RVZR29)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
248	150.00	.14230	1499.0	.7240-01	.9350-01	.1028	.9345	.5701-02	.4017-02	.6270	4.648	548.4
248	180.00	.80000-02	1298.0	.3183	.4535	.4852	.9423	.2691-01	.1765-01	2.086	15.97	586.4
248	180.00	.15000-01	1299.0	.2104	.2829	.2988	.9423	.1657-01	.1167-01	1.603	11.58	567.1
247	180.00	.25000-01	1300.0	.2843	.3956	.4210	.9423	.2334-01	.1576-01	1.972	13.70	579.6
248	180.00	.50000-01	1301.0	.2320	.3115	.3288	.9423	.1823-01	.1287-01	1.777	12.42	566.5
247	180.00	.75000-01	1302.0	.1322	.1735	.1823	.9423	.1011-01	.7328-02	1.084	7.496	556.9
248	180.00	.10000+00	1303.0	.1631	.2201	.2326	.9423	.1290-01	.9042-02	1.229	9.017	568.6
247	225.00	.98000	1425.0	.8800-01	.1274	.1360	.9430	.7536-02	.4879-02	.5560	4.035	590.7
247	263.00	.13600	1336.0	.4990-01	.6280-01	.6830-01	.9345	.3785-02	.2764-02	.4730	3.532	533.6
248	263.00	.20000	1472.0	.7450-01	.9510-01	.1040	.9345	.5766-02	.4129-02	.6720	4.992	541.9
248	263.00	.30000	1337.0	.8110-01	.1037	.1135	.9345	.6294-02	.4496-02	.7270	5.491	543.0
248	263.00	.40000	1473.0	.7330-01	.9420-01	.1033	.9345	.5727-02	.4067-02	.6470	4.805	545.4
248	263.00	.50000	1474.0	.7310-01	.9350-01	.1024	.9345	.5679-02	.4052-02	.6520	4.846	543.5
248	263.00	.60000	1475.0	.6120-01	.7780-01	.8500-01	.9345	.4712-02	.3393-02	.5600	4.164	539.7
248	263.00	.75000	1338.0	.7320-01	.9440-01	.1036	.9345	.5747-02	.4060-02	.6380	4.731	547.4
248	263.00	.81500	1339.0	.6910-01	.8920-01	.9800-01	.9345	.5437-02	.3829-02	.5970	4.427	548.5
248	263.00	.83700	1340.0	.6690-01	.8650-01	.9510-01	.9345	.5274-02	.3710-02	.5780	4.278	548.9
248	263.00	.88400	1341.0	.6280-01	.8070-01	.8860-01	.9345	.4913-02	.3480-02	.5500	4.083	546.4
248	263.00	.89400	1342.0	.6060-01	.7790-01	.8540-01	.9345	.4738-02	.3360-02	.5330	3.955	545.9
248	263.00	.92800	1477.0	.7290-01	.9440-01	.1040	.9345	.5765-02	.4041-02	.6240	4.617	550.2
247	263.00	.93900	1344.0	.9240-01	.1216	.1348	.9345	.7471-02	.5120-02	.7510	5.540	558.0
248	270.00	.80000-02	1304.0	.2313	.3012	.3158	.9424	.1751-01	.1282-01	1.945	15.40	552.9
248	270.00	.50000-01	1306.0	.2278	.2984	.3131	.9424	.1736-01	.1263-01	1.881	13.23	555.6
247	270.00	.75000-01	1307.0	.1484	.1916	.2005	.9424	.1111-01	.8227-02	1.286	9.072	548.5
248	270.00	.10000+00	1308.0	.1674	.2203	.2315	.9424	.1283-01	.9280-02	1.360	10.03	558.0
247	270.00	.11500	1345.0	.1306	.1738	.1937	.9345	.1074-01	.7239-02	1.025	7.540	563.1
247	277.00	.13600	1346.0	.5000-01	.6290-01	.6830-01	.9345	.3788-02	.2769-02	.4750	3.548	533.2
247	277.00	.30000	1347.0	.8130-01	.1042	.1142	.9345	.6328-02	.4509-02	.7240	5.466	544.2
248	277.00	.40000	1464.0	.7510-01	.9600-01	.1051	.9345	.5828-02	.4167-02	.6750	5.012	542.7
248	277.00	.60000	1466.0	.7350-01	.9360-01	.1023	.9345	.5670-02	.4078-02	.6700	4.984	540.3
248	277.00	.70000	1467.0	.8060-01	.1037	.1138	.9345	.6312-02	.4468-02	.7060	5.234	546.6
247	277.00	.75000	1348.0	.7920-01	.1022	.1123	.9345	.6223-02	.4388-02	.6870	5.093	548.1
247	277.00	.81500	1349.0	.8140-01	.1055	.1161	.9345	.6436-02	.4510-02	.6960	5.150	550.5
247	277.00	.83700	1350.0	.7570-01	.9820-01	.1081	.9345	.5993-02	.4198-02	.6470	4.790	550.6
247	277.00	.88400	1351.0	.7050-01	.9090-01	.9990-01	.9345	.5537-02	.3909-02	.6140	4.548	547.8
247	277.00	.89400	1352.0	.7260-01	.9380-01	.1032	.9345	.5718-02	.4026-02	.6280	4.654	548.7
248	277.00	.90000	1468.0	.7330-01	.9450-01	.1038	.9345	.5755-02	.4062-02	.6370	4.725	547.7
248	277.00	.90700	1353.0	.7390-01	.9520-01	.1046	.9345	.5800-02	.4096-02	.6440	4.771	547.5
248	277.00	.92100	1469.0	.7470-01	.9650-01	.1061	.9345	.5882-02	.4140-02	.6450	4.780	548.7
248	277.00	.92800	1470.0	.7970-01	.1032	.1136	.9345	.6301-02	.4418-02	.6820	5.053	550.1
248	277.00	.93700	1471.0	.8270-01	.1074	.1184	.9345	.6564-02	.4585-02	.7020	5.191	551.5
247	277.00	.93900	1354.0	.9670-01	.1276	.1416	.9345	.7848-02	.5361-02	.7810	5.753	559.1
248	335.00	.11000	1309.0	.1906	.2495	.2617	.9425	.1451-01	.1057-01	1.578	11.66	555.2

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN.

RIGHT SRB

HI/HREF

(RVZR29)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
247	337.50	.74000	1355.0	.8470-01	.1104	.1219	.9345	.6756-02	.4694-02	.7100	5.247	553.5
247	337.50	.75000	1356.0	.7840-01	.1022	.1128	.9345	.6255-02	.4346-02	.6570	4.941	553.5
248	337.50	.76500	1357.0	.8840-01	.1159	.1282	.9345	.7110-02	.4902-02	.7280	5.467	556.0
248	337.50	.92500	1359.0	.7970-01	.1048	.1161	.9345	.6436-02	.4422-02	.6520	4.811	557.1
248	337.50	.93200	1360.0	.8310-01	.1094	.1213	.9345	.6727-02	.4610-02	.6760	4.985	557.9
248	337.50	.93900	1361.0	.8610-01	.1144	.1274	.9345	.7064-02	.4773-02	.6790	4.999	562.2

RIGHT SRB

PARAMETRIC DATA

ALPHA = .0000 BETA = 5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
249	.0000	4.900	3.010	37.10	705.0	250.6	.9940	6.306	2335.	.3329-03	.2005-06	3.876
250	.0000	5.000	3.010	37.10	705.0	250.5	.9940	6.304	2335.	.3329-03	.2004-06	3.877

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
249	.5542-01	.9210-02
250	.5540-01	.9209-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
250	.00000	.80000-02	1310.0	.3107	.4454	.4771	.9423	.2643-01	.1721-01	2.004	15.22	588.1
249	.00000	.25000-01	1311.0	.2903	.4297	.4638	.9423	.2570-01	.1609-01	1.747	12.44	596.2
249	.00000	.83700	1364.0	.8000-01	.1088	.1225	.9345	.6790-02	.4434-02	.5900	4.320	571.8
249	.00000	.88400	1365.0	.1017	.1388	.1564	.9345	.8668-02	.5638-02	.7440	5.449	572.7
249	.00000	.90700	1366.0	.8660-01	.1184	.1336	.9345	.7405-02	.4801-02	.6300	4.613	573.5
249	5.0000	.75000-01	1313.0	.1477	.1965	.2075	.9419	.1150-01	.8183-02	1.161	8.266	562.9
249	5.0000	.11000	1314.0	.8160-01	.1067	.1123	.9419	.6223-02	.4521-02	.6760	4.994	555.2
249	20.000	.75000-01	1316.0	.1451	.1949	.2080	.9409	.1152-01	.8041-02	1.108	7.875	566.9
249	20.000	.10000+00	1318.0	.1732	.2348	.2511	.9409	.1391-01	.9596-02	1.288	9.441	570.5
249	20.000	.11000	1319.0	.1797	.2437	.2607	.9409	.1445-01	.9960-02	1.337	9.795	570.6
250	22.500	.72400	1367.0	.9360-01	.1306	.1489	.9345	.8248-02	.5187-02	.6450	4.782	580.2
249	22.500	.74000	1368.0	.8570-01	.1188	.1350	.9345	.7479-02	.4752-02	.6020	4.391	578.2
249	22.500	.75000	1369.0	.1345	.1877	.2139	.9345	.1185-01	.7454-02	.9270	6.763	580.4
250	22.500	.76500	1370.0	.1208	.1678	.1908	.9345	.1057-01	.6693-02	.8420	6.249	578.7
250	22.500	.77100	1371.0	.1144	.1586	.1801	.9345	.9980-02	.6339-02	.8020	5.855	578.0
249	22.500	.92500	1372.0	.6570-01	.8680-01	.9630-01	.9345	.5338-02	.3642-02	.5290	3.899	559.5
249	22.500	.93900	1374.0	.6910-01	.9250-01	.1034	.9345	.5729-02	.3827-02	.5320	3.910	565.7
249	24.400	.95300	1433.0	.1113	.1597	.1731	.9411	.9593-02	.6166-02	.7160	5.201	588.6
249	35.000	.75000-01	1321.0	.1490	.1997	.2143	.9400	.1188-01	.8254-02	1.145	8.140	566.0
249	35.000	.11000	1322.0	.1691	.2280	.2451	.9400	.1358-01	.9373-02	1.280	9.547	568.3

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN, RIGHT SRB HI/HREF

(RVZR30)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
249	35.600	.95300	1434.0	.1025	.1428	.1543	.9405	.8552-02	.5681-02	.7100	5.180	579.8
249	40.000	.95300	1435.0	.9640-01	.1328	.1434	.9402	.7945-02	.5344-02	.6880	5.025	576.1
249	45.000	.74000	1375.0	.1012	.1403	.1594	.9345	.8832-02	.5606-02	.7090	5.260	578.4
249	45.000	.75000	1376.0	.1022	.1413	.1604	.9345	.8888-02	.5662-02	.7200	5.349	577.6
250	45.000	.76500	1377.0	.1126	.1571	.1790	.9345	.9918-02	.6236-02	.7750	5.652	580.2
250	45.000	.77100	1378.0	.1087	.1512	.1721	.9345	.9534-02	.6023-02	.7550	5.507	579.2
250	45.000	.88400	1381.0	.5410-01	.7020-01	.7730-01	.9345	.4283-02	.2999-02	.4610	3.415	550.7
250	45.000	.90700	1382.0	.5040-01	.6500-01	.7140-01	.9345	.3955-02	.2793-02	.4390	3.251	547.5
249	65.000	.11000	1323.0	.2508	.3548	.3912	.9388	.2168-01	.1390-01	1.669	11.95	584.6
249	67.500	.74000	1383.0	.8910-01	.1236	.1405	.9345	.7788-02	.4936-02	.6220	4.619	578.7
249	67.500	.75000	1384.0	.8450-01	.1177	.1341	.9345	.7431-02	.4683-02	.5850	4.336	580.0
250	67.500	.77100	1385.0	.7850-01	.1091	.1242	.9345	.6879-02	.4346-02	.5450	3.975	579.2
249	76.000	.10000+00	1324.0	.2819	.3984	.4398	.9386	.2437-01	.1562-01	1.882	13.70	584.3
249	76.000	.14100	1386.0	.1412	.1956	.2220	.9345	.1230-01	.7826-02	.9930	7.247	578.0
249	76.000	.14800	1387.0	.1185	.1597	.1791	.9345	.9924-02	.6566-02	.8960	6.573	568.3
249	76.000	.15500	1388.0	.1191	.1597	.1785	.9345	.9890-02	.6602-02	.9170	6.735	565.9
249	76.000	.16200	1389.0	.1140	.1514	.1686	.9345	.9345-02	.6315-02	.8990	6.615	562.4
249	76.000	.25000	1390.0	.3200-01	.4070-01	.4440-01	.9345	.2460-02	.1773-02	.2930	2.218	539.5
249	77.500	.95300	1436.0	.7310-01	.9870-01	.1069	.9390	.5924-02	.4052-02	.5510	4.039	568.9
249	77.500	.96700	1437.0	.6980-01	.9450-01	.1025	.9390	.5680-02	.3870-02	.5220	3.824	570.0
249	77.500	.99400	1439.0	.7260-01	.9860-01	.1070	.9390	.5930-02	.4024-02	.5380	3.940	571.1
250	90.000	.15000-01	1325.0	.2965	.4197	.4642	.9385	.2572-01	.1643-01	1.970	14.58	584.6
249	90.000	.25000-01	1326.0	.3228	.4873	.5520	.9385	.3059-01	.1789-01	1.867	13.26	600.4
250	90.000	.40000-01	1327.0	.2799	.3986	.4418	.9385	.2447-01	.1550-01	1.833	13.33	586.3
249	90.000	.60000-01	1328.0	.2179	.2971	.3242	.9385	.1796-01	.1208-01	1.597	10.96	572.5
249	90.000	.75000-01	1329.0	.1228	.1620	.1748	.9385	.9687-02	.6804-02	.9910	6.741	559.2
250	90.000	.13230	1479.0	.2440	.3693	.4392	.9345	.2433-01	.1352-01	1.404	10.14	600.7
250	90.000	.13390	1480.0	.2159	.3209	.3778	.9345	.2093-01	.1196-01	1.288	9.314	596.9
250	90.000	.13560	1481.0	.1773	.2558	.2965	.9345	.1643-01	.9823-02	1.128	8.185	589.7
250	90.000	.13730	1482.0	.1509	.2137	.2454	.9345	.1359-01	.8359-02	1.002	7.290	584.7
250	90.000	.13890	1483.0	.1329	.1831	.2073	.9345	.1149-01	.7364-02	.9470	6.920	575.9
250	90.000	.55000	1391.0	.5470-01	.7270-01	.8090-01	.9345	.4484-02	.3028-02	.4300	3.165	562.5
250	90.000	.65000	1392.0	.6710-01	.8970-01	.1002	.9345	.5551-02	.3719-02	.5200	3.820	564.7
249	90.000	.74000	1393.0	.1160-01	.1480-01	.1620-01	.9345	.8999-03	.6435-03	.1040	.7880	542.7
249	90.000	.76500	1394.0	.6850-01	.9280-01	.1042	.9345	.5775-02	.3796-02	.5110	3.747	570.1
249	90.000	.77100	1395.0	.7350-01	.9820-01	.1097	.9345	.6079-02	.4071-02	.5690	4.180	565.1
249	90.000	.81500	1396.0	.2400-01	.3080-01	.3380-01	.9345	.1875-02	.1330-02	.2110	1.596	545.8
249	90.000	.83700	1397.0	.1910-01	.2440-01	.2670-01	.9345	.1478-02	.1056-02	.1710	1.268	543.1
249	90.000	.88400	1398.0	.1390-01	.1760-01	.1930-01	.9345	.1068-02	.7684-03	.1270	.9420	540.1
249	90.000	.89400	1399.0	.2970-01	.3730-01	.4060-01	.9345	.2249-02	.1646-02	.2830	2.116	532.5
249	90.000	.90700	1400.0	.1900-01	.2430-01	.2660-01	.9345	.1473-02	.1053-02	.1700	1.266	542.9
249	90.000	.91700	1401.0	.2820-01	.3620-01	.3960-01	.9345	.2196-02	.1563-02	.2500	1.856	544.8
249	90.000	.93200	1402.0	.4150-01	.5350-01	.5880-01	.9345	.3260-02	.2300-02	.3610	2.672	546.6

IH72, OTS CLEAN, RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
249	90.000	.93900	1403.0	.4140-01	.5400-01	.5960-01	.9345	.3301-02	.2295-02	.3480	2.569	553.3
250	95.000	.13560	1484.0	.1720	.2495	.2901	.9345	.1607-01	.9527-02	1.080	7.832	591.2
250	95.000	.13730	1485.0	.1564	.2207	.2530	.9345	.1401-01	.8665-02	1.048	7.627	583.6
250	95.000	.13890	1486.0	.1343	.1861	.2113	.9345	.1171-01	.7443-02	.9430	6.886	577.8
250	95.000	.14560	1487.0	.1079	.1464	.1645	.9345	.9115-02	.5979-02	.8020	5.878	570.4
250	95.000	.14730	1488.0	.1189	.1606	.1802	.9345	.9984-02	.6586-02	.8930	6.548	569.0
249	104.00	.10000+00	1330.0	.2857	.4079	.4519	.9386	.2504-01	.1583-01	1.864	13.55	587.1
249	104.00	.12000	1404.0	.2146	.3135	.3657	.9345	.2027-01	.1189-01	1.329	9.631	593.0
249	104.00	.12700	1405.0	.2269	.3337	.3907	.9345	.2165-01	.1257-01	1.384	10.02	594.7
249	104.00	.13400	1406.0	.1755	.2512	.2900	.9345	.1607-01	.9724-02	1.137	8.260	587.9
249	104.00	.14100	1407.0	.1449	.2007	.2279	.9345	.1263-01	.8032-02	1.019	7.440	577.9
249	104.00	.14800	1408.0	.1166	.1570	.1759	.9345	.9747-02	.6464-02	.8860	6.499	567.8
249	104.00	.15500	1409.0	.1177	.1576	.1760	.9345	.9754-02	.6524-02	.9100	6.683	565.4
249	104.00	.16200	1410.0	.1157	.1540	.1717	.9345	.9513-02	.6413-02	.9080	6.681	563.1
249	104.00	.18000	1412.0	.7400-01	.9720-01	.1078	.9345	.5972-02	.4098-02	.6030	4.447	557.6
249	104.00	.18600	1413.0	.6890-01	.9020-01	.9980-01	.9345	.5529-02	.3816-02	.5680	4.196	555.8
249	104.00	.19300	1414.0	.7000-01	.9140-01	.1010	.9345	.5596-02	.3877-02	.5830	4.303	554.5
249	104.00	.20000	1415.0	.6820-01	.8890-01	.9820-01	.9345	.5442-02	.3778-02	.5710	4.217	553.8
249	104.00	.25000	1416.0	.4000-01	.5150-01	.5660-01	.9345	.3136-02	.2214-02	.3480	2.621	547.8
250	112.00	.13560	1489.0	.1380	.1886	.2128	.9345	.1179-01	.7643-02	1.003	7.341	573.3
250	112.00	.13730	1490.0	.1325	.1820	.2058	.9345	.1140-01	.7342-02	.9510	6.956	575.0
250	112.00	.13890	1491.0	.1252	.1713	.1934	.9345	.1072-01	.6938-02	.9080	6.644	573.6
250	112.00	.14560	1492.0	.3070-01	.3930-01	.4310-01	.9345	.2387-02	.1700-02	.2730	2.025	544.2
249	112.50	.74000	1417.0	.5540-01	.7480-01	.8380-01	.9345	.4644-02	.3072-02	.4190	3.075	568.4
249	112.50	.75000	1418.0	.5680-01	.7660-01	.8590-01	.9345	.4758-02	.3149-02	.4300	3.152	568.3
250	112.50	.77100	1419.0	.6300-01	.8350-01	.9300-01	.9345	.5150-02	.3488-02	.4990	3.733	561.6
249	112.50	.92500	1420.0	.1890-01	.2440-01	.2670-01	.9345	.1481-02	.1050-02	.1660	1.233	546.4
249	112.50	.93200	1421.0	.2740-01	.3540-01	.3890-01	.9345	.2156-02	.1517-02	.2360	1.750	549.0
249	112.50	.93900	1422.0	.3730-01	.4860-01	.5370-01	.9345	.2974-02	.2070-02	.3140	2.323	553.0
250	112.50	.96700	1441.0	.3350-01	.4590-01	.4990-01	.9392	.2763-02	.1857-02	.2420	1.773	574.0
250	112.50	.99400	1443.0	.2420-01	.3310-01	.3600-01	.9392	.1993-02	.1339-02	.1750	1.279	574.0
249	135.00	.25000-01	1332.0	.2833	.4196	.4667	.9395	.2586-01	.1570-01	1.703	12.32	596.3
250	135.00	.50000-01	1333.0	.2393	.3347	.3654	.9395	.2024-01	.1326-01	1.639	11.95	580.9
249	135.00	.75000-01	1334.0	.1350	.1802	.1938	.9395	.1074-01	.7479-02	1.050	7.853	564.3
249	135.00	.10000+00	1335.0	.1536	.2059	.2217	.9395	.1229-01	.8514-02	1.183	8.687	565.9
249	135.00	.40000	1423.0	.8080-01	.1082	.1210	.9345	.6703-02	.4476-02	.6220	4.645	565.8
250	135.00	.92500	1424.0	.1520-01	.1950-01	.2140-01	.9345	.1183-02	.8410-03	.1340	.9960	545.0
250	140.00	.13560	1494.0	.7870-01	.1029	.1139	.9345	.6308-02	.4358-02	.6500	4.802	555.3
250	140.00	.13730	1495.0	.8530-01	.1123	.1245	.9345	.6898-02	.4726-02	.6930	5.108	558.0
250	140.00	.13890	1496.0	.8880-01	.1180	.1314	.9345	.7283-02	.4921-02	.7000	5.154	562.2
250	140.00	.14560	1497.0	.9400-01	.1251	.1395	.9345	.7729-02	.5206-02	.7360	5.414	563.1
250	150.00	.14230	1499.0	.8900-01	.1177	.1307	.9345	.7241-02	.4933-02	.7140	5.262	559.7
250	180.00	.80000-02	1298.0	.3386	.5134	.5575	.9423	.3089-01	.1876-01	1.941	14.75	601.0

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN, RIGHT SRB HI/HREF

(RVZR30)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
250	180.00	.15000-01	1299.0	.2510	.3483	.3703	.9423	.2052-01	.1390-01	1.753	12.59	578.5
249	180.00	.25000-01	1300.0	.2930	.4274	.4597	.9423	.2547-01	.1624-01	1.821	12.57	592.7
250	180.00	.50000-01	1301.0	.2522	.3489	.3707	.9423	.2054-01	.1397-01	1.774	12.34	577.5
249	180.00	.75000-01	1302.0	.1499	.2003	.2111	.9423	.1170-01	.8305-02	1.163	8.013	564.7
250	180.00	.10000+00	1303.0	.1722	.2346	.2484	.9423	.1376-01	.9542-02	1.265	9.260	572.0
249	225.00	.98000	1425.0	.8910-01	.1342	.1389	.9466	.7699-02	.4937-02	.5180	3.740	599.9
249	263.00	.13600	1336.0	.5730-01	.7450-01	.8180-01	.9350	.4535-02	.3178-02	.4860	3.599	551.7
250	263.00	.20000	1472.0	.8000-01	.1061	.1176	.9350	.6515-02	.4432-02	.6350	4.672	561.3
250	263.00	.30000	1337.0	.9270-01	.1246	.1390	.9350	.7699-02	.5135-02	.7060	5.272	567.0
250	263.00	.40000	1473.0	.7940-01	.1069	.1192	.9350	.6607-02	.4397-02	.6020	4.417	567.6
250	263.00	.50000	1474.0	.7520-01	.1014	.1132	.9350	.6271-02	.4165-02	.5680	4.167	568.2
250	263.00	.60000	1475.0	.8550-01	.1180	.1332	.9350	.7378-02	.4737-02	.6060	4.429	576.6
250	263.00	.75000	1338.0	.5240-01	.7150-01	.8020-01	.9350	.4445-02	.2904-02	.3840	2.809	572.4
250	263.00	.81500	1339.0	.5650-01	.7730-01	.8680-01	.9350	.4809-02	.3132-02	.4110	3.010	573.2
250	263.00	.83700	1340.0	.5000-01	.6830-01	.7670-01	.9350	.4251-02	.2768-02	.3630	2.660	573.2
250	263.00	.88400	1341.0	.4510-01	.6200-01	.6990-01	.9350	.3874-02	.2499-02	.3220	2.357	575.5
250	263.00	.89400	1342.0	.4690-01	.6400-01	.7200-01	.9350	.3988-02	.2596-02	.3410	2.492	573.3
249	263.00	.92800	1477.0	.7280-01	.1008	.1140	.9350	.6316-02	.4031-02	.5100	3.725	578.0
250	263.00	.93900	1344.0	.1028	.1437	.1632	.9350	.9044-02	.5695-02	.7050	5.137	581.0
250	270.00	.80000-02	1304.0	.2464	.3408	.3471	.9476	.1923-01	.1365-01	1.737	13.59	577.3
250	270.00	.50000-01	1306.0	.2540	.3548	.3617	.9476	.2004-01	.1407-01	1.745	12.12	580.5
249	270.00	.75000-01	1307.0	.1627	.2197	.2236	.9476	.1239-01	.9018-02	1.225	8.553	569.0
250	270.00	.10000+00	1308.0	.1822	.2516	.2562	.9476	.1420-01	.1009-01	1.290	9.422	576.8
249	270.00	.11500	1345.0	.1420	.1992	.2265	.9350	.1255-01	.7869-02	.9660	7.038	582.0
249	277.00	.13600	1346.0	.5700-01	.7410-01	.8150-01	.9350	.4515-02	.3156-02	.4810	3.555	552.5
249	277.00	.30000	1347.0	.9220-01	.1239	.1381	.9350	.7654-02	.5108-02	.7030	5.251	567.1
250	277.00	.40000	1464.0	.8170-01	.1102	.1230	.9350	.6815-02	.4529-02	.6180	4.537	568.0
250	277.00	.60000	1466.0	.7970-01	.1100	.1241	.9350	.6877-02	.4415-02	.5650	4.125	576.6
250	277.00	.70000	1467.0	.5080-01	.7000-01	.7890-01	.9350	.4374-02	.2815-02	.3620	2.644	576.0
249	277.00	.75000	1348.0	.6000-01	.8230-01	.9260-01	.9350	.5131-02	.3326-02	.4330	3.168	574.5
249	277.00	.81500	1349.0	.6980-01	.9680-01	.1096	.9350	.6073-02	.3865-02	.4870	3.556	578.7
249	277.00	.83700	1350.0	.5980-01	.8300-01	.9390-01	.9350	.5202-02	.3315-02	.4190	3.056	578.5
249	277.00	.88400	1351.0	.6630-01	.9170-01	.1036	.9350	.5739-02	.3677-02	.4690	3.424	577.3
249	277.00	.89400	1352.0	.6380-01	.8810-01	.9950-01	.9350	.5514-02	.3533-02	.4500	3.290	577.3
250	277.00	.90600	1468.0	.5720-01	.7950-01	.8990-01	.9350	.4983-02	.3171-02	.3990	2.914	578.6
250	277.00	.90700	1353.0	.6090-01	.8460-01	.9570-01	.9350	.5303-02	.3375-02	.4250	3.103	578.6
250	277.00	.92100	1469.0	.6900-01	.9630-01	.1092	.9350	.6051-02	.3822-02	.4750	3.466	580.2
250	277.00	.92800	1470.0	.7620-01	.1067	.1212	.9350	.6715-02	.4223-02	.5210	3.799	581.1
250	277.00	.93700	1471.0	.7950-01	.1115	.1269	.9350	.7028-02	.4407-02	.5410	3.944	581.7
249	277.00	.93900	1354.0	.1111	.1588	.1824	.9350	.1011-01	.6154-02	.7210	5.239	587.6
250	335.00	.11000	1309.0	.1977	.2714	.2833	.9444	.1570-01	.1095-01	1.420	10.38	574.9
249	337.50	.74000	1355.0	.9830-01	.1357	.1537	.9346	.8519-02	.5[illegible]-02	.6960	5.084	577.0
249	337.50	.75000	1356.0	.9570-01	.1328	.1508	.9346	.8356-02	.5[illegible]-02	.6890	4.968	578.6

IH72, OTS CLEAN, RIGHT SRB HI/HREF

(RVZR30)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
250	337.50	.76500	1357.0	.1017	.1445	.1662	.9346	.9205-02	.5632-02	.6690	4.947	585.8
250	337.50	.92500	1359.0	.8320-01	.1146	.1297	.9346	.7186-02	.4608-02	.5920	4.328	576.0
250	337.50	.93200	1360.0	.8860-01	.1228	.1394	.9346	.7721-02	.4911-02	.6220	4.542	577.9
250	337.50	.93900	1361.0	.1033	.1459	.1673	.9346	.9267-02	.5720-02	.6890	5.016	584.1

PARAMETRIC DATA

ALPHA = 5.000 BETA = -5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
257	4.970	-5.000	3.010	37.10	705.0	250.8	.9940	6.305	2336.	.3326-03	.2006-06	3.872
258	4.990	-5.000	3.010	37.10	705.0	250.8	.9950	6.308	2336.	.3327-03	.2007-06	3.873

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
257	.5542-01	.9214-02
258	.5543-01	.9213-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
258	.00000	.80000-02	1310.0	.2372	.3170	.3437	.9384	.1905-01	.1315-01	1.842	14.15	565.2
257	.00000	.25000-01	1311.0	.1783	.2355	.2543	.9385	.1409-01	.9881-02	1.435	10.39	560.1
257	.00000	.76500	1362.0	.5830-01	.7680-01	.8520-01	.9345	.4719-02	.3231-02	.4730	3.548	558.7
257	.00000	.83700	1364.0	.9090-01	.1199	.1331	.9345	.7373-02	.5037-02	.7340	5.410	559.5
257	.00000	.88400	1365.0	.7940-01	.1041	.1153	.9345	.6390-02	.4397-02	.6510	4.805	557.1
257	.00000	.90700	1366.0	.7140-01	.9440-01	.1049	.9345	.5816-02	.3956-02	.5710	4.207	560.8
257	5.0000	.75000-01	1313.0	.8880-01	.1136	.1212	.9387	.6718-02	.4919-02	.7930	5.701	544.0
257	5.0000	.11000	1314.0	.3290-01	.4140-01	.4400-01	.9387	.2436-02	.1821-02	.3110	2.323	534.2
257	20.000	.75000-01	1316.0	.9820-01	.1264	.1342	.9398	.7439-02	.5442-02	.8600	6.170	547.2
257	20.000	.10000+00	1318.0	.1118	.1454	.1549	.9398	.8581-02	.6194-02	.9450	6.984	552.7
257	20.000	.11000	1319.0	.1149	.1494	.1592	.9398	.8820-02	.6366-02	.9710	7.176	552.8
258	22.500	.72400	1367.0	.5490-01	.7080-01	.7770-01	.9345	.4309-02	.3042-02	.4780	3.601	548.2
257	22.500	.74000	1368.0	.9520-01	.1232	.1356	.9345	.7516-02	.5277-02	.8180	6.057	550.2
257	22.500	.75000	1369.0	.6680-01	.8720-01	.9620-01	.9345	.5334-02	.3704-02	.5600	4.137	554.1
258	22.500	.76500	1370.0	.6450-01	.8350-01	.9190-01	.9345	.5093-02	.3575-02	.5540	4.172	550.3
258	22.500	.77100	1371.0	.6380-01	.8260-01	.9090-01	.9345	.5037-02	.3538-02	.5490	4.067	550.1
257	22.500	.92500	1372.0	.5470-01	.7080-01	.7790-01	.9345	.4315-02	.3033-02	.4710	3.490	549.8
257	22.500	.93900	1374.0	.8250-01	.1082	.1197	.9345	.6633-02	.4574-02	.6810	5.022	556.4
257	24.400	.95300	1433.0	.1373	.1889	.2030	.9407	.1125-01	.7611-02	.9830	7.183	576.1
257	35.000	.75000-01	1321.0	.9730-01	.1252	.1318	.9412	.7303-02	.5393-02	.8550	6.137	546.7

IH72, OTS CLEAN, RIGHT SRB HI/HREF

(RVZR31)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
257	35.000	.11000	1322.0	.1137	.1482	.1565	.9412	.8674-02	.6299-02	.9540	7.167	553.8
257	35.600	.95300	1434.0	.1222	.1662	.1766	.9419	.9785-02	.6772-02	.9020	6.604	572.1
257	40.000	.95300	1435.0	.1103	.1496	.1582	.9423	.8766-02	.6115-02	.8220	6.025	570.8
257	45.000	.74000	1375.0	.6850-01	.8800-01	.9650-01	.9345	.5349-02	.3798-02	.6050	4.565	545.9
257	45.000	.75000	1376.0	.9980-01	.1287	.1414	.9345	.7834-02	.5531-02	.8690	6.552	548.1
258	45.000	.76500	1377.0	.7350-01	.9540-01	.1051	.9345	.5823-02	.4072-02	.6260	4.629	551.7
258	45.000	.77100	1378.0	.7980-01	.1034	.1139	.9345	.6315-02	.4423-02	.6820	5.047	551.1
258	45.000	.88400	1381.0	.3040-01	.3880-01	.4250-01	.9345	.2353-02	.1685-02	.2740	2.040	542.5
258	45.000	.90700	1382.0	.2990-01	.3840-01	.4210-01	.9345	.2332-02	.1660-02	.2660	1.977	544.9
257	65.000	.11000	1323.0	.2004	.2762	.2879	.9446	.1596-01	.1110-01	1.426	10.25	576.8
257	67.500	.74000	1383.0	.5880-01	.7540-01	.8250-01	.9346	.4571-02	.3260-02	.5240	3.955	544.5
257	67.500	.75000	1384.0	.5150-01	.6650-01	.7300-01	.9346	.4043-02	.2856-02	.4480	3.378	548.2
258	67.500	.77100	1385.0	.6770-01	.8760-01	.9630-01	.9346	.5337-02	.3755-02	.5840	4.324	549.8
257	76.000	.10000+00	1324.0	.1958	.2709	.2797	.9459	.1550-01	.1085-01	1.380	10.07	578.1
257	76.000	.14100	1386.0	.1054	.1358	.1488	.9348	.8248-02	.5843-02	.9220	6.834	547.5
257	76.000	.14800	1387.0	.7880-01	.1000+00	.1090	.9348	.6038-02	.4367-02	.7260	5.409	538.9
257	76.000	.15500	1388.0	.6900-01	.8710-01	.9470-01	.9348	.5250-02	.3825-02	.6480	4.836	535.7
257	76.000	.16200	1389.0	.5950-01	.7480-01	.8110-01	.9348	.4496-02	.3297-02	.5690	4.249	532.7
257	76.000	.25000	1390.0	.1960-01	.2430-01	.2620-01	.9348	.1453-02	.1087-02	.1990	1.519	522.3
257	77.500	.95300	1436.0	.4740-01	.6330-01	.6460-01	.9469	.3581-02	.2625-02	.3690	2.708	564.8
257	77.500	.96700	1437.0	.9650-01	.1296	.1324	.9469	.7339-02	.5346-02	.7380	5.415	567.2
257	77.500	.99400	1439.0	.8750-01	.1166	.1190	.9469	.6596-02	.4850-02	.6870	5.048	563.7
258	90.000	.15000-01	1325.0	.2714	.3676	.3742	.9475	.2074-01	.1504-01	2.028	15.11	570.6
257	90.000	.25000-01	1326.0	.3044	.4344	.4438	.9475	.2460-01	.1687-01	1.989	14.22	587.4
258	90.000	.40000-01	1327.0	.2359	.3170	.3225	.9475	.1788-01	.1308-01	1.802	13.23	567.5
257	90.000	.60000-01	1328.0	.1726	.2280	.2318	.9475	.1284-01	.9565-02	1.387	9.580	560.2
257	90.000	.75000-01	1329.0	.1028	.1328	.1348	.9475	.7469-02	.5695-02	.8880	6.067	549.4
258	90.000	.13230	1479.0	.2232	.3292	.3838	.9350	.2127-01	.1237-01	1.356	9.810	595.8
258	90.000	.13390	1480.0	.2022	.2824	.3206	.9350	.1777-01	.1121-01	1.391	10.14	581.3
258	90.000	.13560	1481.0	.1729	.2319	.2584	.9350	.1432-01	.9583-02	1.327	9.745	566.8
258	90.000	.13730	1482.0	.1667	.2218	.2462	.9350	.1365-01	.9240-02	1.312	9.647	563.4
258	90.000	.13890	1483.0	.1341	.1767	.1953	.9350	.1083-01	.7435-02	1.088	8.016	559.1
258	90.000	.55000	1391.0	.1012	.1314	.1444	.9350	.8002-02	.5611-02	.8610	6.367	551.9
258	90.000	.65000	1392.0	.7810-01	.1006	.1101	.9350	.6103-02	.4331-02	.6840	5.071	547.4
257	90.000	.76500	1394.0	.5360-01	.7020-01	.7730-01	.9350	.4285-02	.2973-02	.4450	3.286	555.5
257	90.000	.77100	1395.0	.4700-01	.6140-01	.6760-01	.9350	.3745-02	.2603-02	.3910	2.891	554.9
257	90.000	.81500	1396.0	.3610-01	.4650-01	.5090-01	.9350	.2818-02	.2001-02	.3160	2.384	547.2
257	90.000	.83700	1397.0	.4010-01	.5150-01	.5630-01	.9350	.3119-02	.2225-02	.3560	2.640	545.3
257	90.000	.88400	1398.0	.3050-01	.3860-01	.4200-01	.9350	.2328-02	.1688-02	.2820	2.097	538.5
257	90.000	.89400	1399.0	.5150-01	.6420-01	.6920-01	.9350	.3836-02	.2857-02	.5130	3.843	525.8
257	90.000	.90700	1400.0	.3210-01	.4100-01	.4480-01	.9350	.2481-02	.1780-02	.2890	2.147	542.9
257	90.000	.91700	1401.0	.3300-01	.4230-01	.4620-01	.9350	.2558-02	.1827-02	.2930	2.175	544.9
257	90.000	.93200	1402.0	.4800-01	.6220-01	.6820-01	.9350	.3780-02	.2658-02	.4110	3.039	550.8

IH72, OTS CLEAN, RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
257	90.000	.93900	1403.0	.5090-01	.6660-01	.7330-01	.9350	.4061-02	.2823-02	.4250	3.136	554.9
258	95.000	.13560	1484.0	.1926	.2655	.2993	.9351	.1659-01	.1068-01	1.371	10.02	576.9
258	95.000	.13730	1485.0	.1763	.2380	.2657	.9351	.1473-01	.9773-02	1.330	9.755	569.2
258	95.000	.13890	1486.0	.1643	.2200	.2447	.9351	.1356-01	.9106-02	1.269	9.319	566.0
258	95.000	.14560	1487.0	.1383	.1837	.2036	.9351	.1128-01	.7668-02	1.096	8.060	562.5
258	95.000	.14730	1488.0	.1291	.1695	.1869	.9351	.1036-01	.7154-02	1.058	7.801	557.5
257	104.00	.10000+00	1330.0	.1932	.2729	.2756	.9488	.1527-01	.1070-01	1.292	9.405	584.5
257	104.00	.12000	1404.0	.2262	.3313	.3839	.9353	.2128-01	.1253-01	1.393	10.09	594.1
257	104.00	.12700	1405.0	.2427	.3766	.4497	.9353	.2492-01	.1345-01	1.334	9.608	606.0
257	104.00	.13400	1406.0	.1891	.2610	.2939	.9353	.1629-01	.1048-01	1.342	9.800	577.2
257	104.00	.14100	1407.0	.1703	.2294	.2555	.9353	.1416-01	.9436-02	1.291	9.474	568.4
257	104.00	.14800	1408.0	.1416	.1881	.2083	.9353	.1154-01	.7846-02	1.119	8.230	562.7
257	104.00	.15500	1409.0	.1326	.1746	.1926	.9353	.1067-01	.7351-02	1.079	7.952	558.5
257	104.00	.16200	1410.0	.1220	.1598	.1758	.9353	.9742-02	.6763-02	1.010	7.454	555.9
257	104.00	.18000	1412.0	.9720-01	.1266	.1390	.9353	.7704-02	.5384-02	.8160	6.032	553.6
257	104.00	.18600	1413.0	.9430-01	.1226	.1345	.9353	.7453-02	.5226-02	.7980	5.902	552.5
257	104.00	.19300	1414.0	.8750-01	.1134	.1243	.9353	.6889-02	.4849-02	.7480	5.531	551.1
257	104.00	.20000	1415.0	.8520-01	.1105	.1211	.9353	.6712-02	.4722-02	.7270	5.380	551.2
258	112.00	.13560	1489.0	.7570-01	.9730-01	.1063	.9353	.5890-02	.4194-02	.6650	5.018	546.6
258	112.00	.13730	1490.0	.1525	.2089	.2341	.9354	.1298-01	.8453-02	1.105	8.079	574.7
258	112.00	.13890	1491.0	.1586	.2181	.2449	.9354	.1357-01	.8793-02	1.138	8.313	576.0
258	112.00	.14560	1492.0	.1606	.2190	.2450	.9354	.1358-01	.8901-02	1.177	8.611	573.2
257	112.50	.74000	1417.0	.4180-01	.5390-01	.5890-01	.9354	.3266-02	.2316-02	.3630	2.689	548.7
257	112.50	.75000	1418.0	.7020-01	.9310-01	.1030	.9354	.5706-02	.3890-02	.5570	4.097	562.1
258	112.50	.77100	1419.0	.7190-01	.9540-01	.1055	.9354	.5845-02	.3984-02	.5700	4.195	562.1
257	112.50	.92500	1420.0	.6230-01	.8300-01	.9190-01	.9354	.5096-02	.3455-02	.4890	3.655	563.9
257	112.50	.93200	1421.0	.2830-01	.3660-01	.3990-01	.9354	.2214-02	.1569-02	.2460	1.819	548.8
257	112.50	.93900	1422.0	.6260-01	.8140-01	.8930-01	.9354	.4950-02	.3467-02	.5270	3.896	553.2
257	112.50	.95300	1440.0	.7090-01	.9300-01	.1023	.9354	.5669-02	.3928-02	.5830	4.298	556.9
258	112.50	.96700	1441.0	.8080-01	.1107	.1105	.9502	.6123-02	.4476-02	.5840	4.271	574.8
258	112.50	.99400	1443.0	.1083	.1500	.1497	.9502	.8299-02	.6002-02	.7610	5.556	578.5
257	135.00	.25000-01	1332.0	.8860-01	.1212	.1210	.9502	.6706-02	.4911-02	.6440	4.710	574.2
258	135.00	.50000-01	1333.0	.3008	.4384	.4380	.9501	.2427-01	.1667-01	1.872	13.57	592.9
257	135.00	.75000-01	1334.0	.2492	.3419	.3417	.9501	.1894-01	.1382-01	1.797	13.14	575.3
257	135.00	.10000+00	1335.0	.1434	.1915	.1914	.9501	.1060-01	.7944-02	1.115	8.333	564.9
257	135.00	.40000	1423.0	.1725	.2352	.2351	.9501	.1303-01	.9558-02	1.264	9.253	573.0
258	135.00	.92500	1424.0	.9730-01	.1310	.1456	.9356	.8070-02	.5392-02	.7380	5.508	568.3
258	140.00	.13560	1494.0	.7190-01	.9670-01	.1075	.9356	.5956-02	.3987-02	.5480	4.020	567.9
258	140.00	.13730	1495.0	.1059	.1386	.1521	.9356	.8433-02	.5871-02	.8790	6.486	555.7
258	140.00	.13890	1496.0	.1061	.1395	.1534	.9356	.8502-02	.5883-02	.8680	6.402	557.8
258	140.00	.14560	1497.0	.1123	.1482	.1632	.9356	.9046-02	.6227-02	.9080	6.692	559.5
258	150.00	.14230	1499.0	.1164	.1533	.1687	.9356	.9353-02	.6450-02	.9440	6.961	558.9
				.1096	.1441	.1586	.9355	.8789-02	.6074-02	.8950	6.599	558.0

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN, RIGHT SRB HI/HREF

(RVZR31)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
258	180.00	.80000-02	1298.0	.3187	.4691	.4804	.9475	.2663-01	.1767-01	1.943	14.81	595.3
258	180.00	.15000-01	1299.0	.2689	.3651	.3718	.9475	.2061-01	.1491-01	1.995	14.37	571.5
257	180.00	.25000-01	1300.0	.2936	.4176	.4266	.9475	.2364-01	.1627-01	1.933	13.38	586.4
258	180.00	.50000-01	1301.0	.2488	.3396	.3459	.9475	.1917-01	.1379-01	1.819	12.68	573.4
257	180.00	.75000-01	1302.0	.1540	.2056	.2092	.9475	.1159-01	.8534-02	1.198	8.254	564.8
258	180.00	.10000+00	1303.0	.1840	.2524	.2572	.9475	.1426-01	.1020-01	1.327	9.703	575.2
257	225.00	.98000	1425.0	.1432	.2011	.2134	.9429	.1183-01	.7935-02	.9710	7.073	582.8
257	263.00	.13600	1336.0	.3540-01	.4430-01	.4800-01	.9345	.2662-02	.1960-02	.3430	2.566	530.1
258	263.00	.20000	1472.0	.3600-01	.4540-01	.4940-01	.9345	.2736-02	.1996-02	.3410	2.543	534.6
258	263.00	.30000	1337.0	.5170-01	.6510-01	.7080-01	.9345	.3924-02	.2864-02	.4900	3.716	534.4
258	263.00	.40000	1473.0	.5060-01	.6450-01	.7040-01	.9345	.3904-02	.2805-02	.4610	3.425	541.2
258	263.00	.50000	1474.0	.5160-01	.6570-01	.7180-01	.9345	.3979-02	.2862-02	.4710	3.503	540.8
258	263.00	.60000	1475.0	.7040-01	.8950-01	.9770-01	.9345	.5415-02	.3902-02	.6450	4.800	540.0
258	263.00	.75000	1338.0	.5650-01	.7200-01	.7880-01	.9345	.4366-02	.3130-02	.5100	3.794	542.3
258	263.00	.81500	1339.0	.5580-01	.7170-01	.7870-01	.9345	.4363-02	.3094-02	.4920	3.648	546.4
258	263.00	.83700	1340.0	.6000-01	.7720-01	.8480-01	.9345	.4701-02	.3325-02	.5250	3.893	547.5
258	263.00	.88400	1341.0	.7310-01	.9370-01	.1026	.9345	.5690-02	.4050-02	.6500	4.821	545.0
258	263.00	.89400	1342.0	.7070-01	.9060-01	.9920-01	.9345	.5500-02	.3921-02	.6310	4.686	544.4
258	263.00	.92800	1477.0	.7320-01	.9450-01	.1039	.9345	.5760-02	.4056-02	.6340	4.695	549.1
257	263.00	.93900	1344.0	.1015	.1334	.1478	.9345	.8190-02	.5625-02	.8300	6.120	557.7
258	270.00	.80000-02	1304.0	.1986	.2597	.2796	.9384	.1550-01	.1101-01	1.651	13.06	555.4
258	270.00	.50000-01	1306.0	.1726	.2247	.2415	.9384	.1339-01	.9570-02	1.457	10.25	553.1
257	270.00	.75000-01	1307.0	.1107	.1431	.1534	.9385	.8503-02	.6133-02	.9550	6.734	549.6
258	270.00	.10000+00	1308.0	.1258	.1647	.1774	.9384	.9834-02	.6975-02	1.042	7.690	556.0
257	270.00	.11500	1345.0	.9260-01	.1221	.1356	.9345	.7512-02	.5130-02	.7470	5.504	559.6
257	277.00	.13600	1346.0	.3190-01	.3990-01	.4330-01	.9345	.2401-02	.1766-02	.3090	2.309	530.4
257	277.00	.30000	1347.0	.5530-01	.7010-01	.7650-01	.9345	.4237-02	.3064-02	.5110	3.873	538.3
258	277.00	.40000	1464.0	.4960-01	.6290-01	.6860-01	.9345	.3805-02	.2751-02	.4590	3.415	538.6
258	277.00	.60000	1466.0	.7280-01	.9270-01	.1013	.9345	.5613-02	.4037-02	.6640	4.938	540.9
258	277.00	.70000	1467.0	.5870-01	.7540-01	.8270-01	.9345	.4584-02	.3256-02	.5190	3.851	545.9
257	277.00	.75000	1348.0	.5330-01	.6870-01	.7540-01	.9345	.4179-02	.2954-02	.4660	3.451	547.6
257	277.00	.81500	1349.0	.6460-01	.8370-01	.9220-01	.9345	.5108-02	.3582-02	.5540	4.101	550.6
257	277.00	.83700	1350.0	.6590-01	.8590-01	.9480-01	.9345	.5253-02	.3654-02	.5550	4.098	553.5
257	277.00	.88400	1351.0	.5560-01	.7190-01	.7910-01	.9345	.4383-02	.3084-02	.4800	3.558	549.5
257	277.00	.89400	1352.0	.6210-01	.8040-01	.8850-01	.9345	.4903-02	.3440-02	.5320	3.940	550.5
258	277.00	.90000	1468.0	.6690-01	.8640-01	.9490-01	.9345	.5262-02	.3708-02	.5800	4.298	548.9
258	277.00	.90700	1353.0	.6830-01	.8820-01	.9690-01	.9345	.5371-02	.3785-02	.5920	4.388	548.9
258	277.00	.92100	1469.0	.7420-01	.9580-01	.1053	.9345	.5838-02	.4111-02	.6420	4.757	549.1
258	277.00	.92800	1470.0	.8220-01	.1065	.1173	.9345	.6501-02	.4558-02	.7040	5.213	550.8
258	277.00	.93700	1471.0	.8460-01	.1100	.1214	.9345	.6729-02	.4687-02	.7140	5.274	553.1
257	277.00	.93900	1354.0	.1040	.1383	.1540	.9345	.8534-02	.5764-02	.8200	6.035	562.9
258	335.00	.11000	1309.0	.1204	.1564	.1691	.9375	.9372-02	.6676-02	1.023	7.568	552.1
257	337.50	.74000	1355.0	.7710-01	.1002	.1105	.9345	.6125-02	.4273-02	.6530	4.826	552.5

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN, RIGHT SRB HI/HREF (RVZR31)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
257	337.50	.75000	1356.0	.7660-01	.9940-01	.1095	.9345	.6070-02	.4244-02	.6520	4.902	551.7
258	337.50	.76500	1357.0	.9290-01	.1212	.1338	.9345	.7419-02	.5147-02	.7770	5.835	554.4
258	337.50	.92500	1359.0	.8230-01	.1084	.1202	.9345	.6663-02	.4564-02	.6690	4.933	558.7
258	337.50	.93200	1360.0	.8640-01	.1140	.1265	.9345	.7013-02	.4790-02	.6980	5.144	559.6
258	337.50	.93900	1361.0	.9640-01	.1284	.1431	.9345	.7933-02	.5341-02	.7550	5.552	564.0

RIGHT SRB

PARAMETRIC DATA

ALPHA = 5.000 BETA = .0000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
253	4.980	.0000	3.010	37.10	705.0	250.8	.9940	6.303	2336.	.3325-03	.2006-06	3.872
254	4.980	.0000	3.010	37.10	705.0	250.8	.9960	6.314	2336.	.3330-03	.2007-06	3.877

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
253	.5541-01	.9215-02
254	.5546-01	.9209-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
254	.00000	.80000-02	1310.0	.2687	.3572	.3865	.9385	.2144-01	.1490-01	2.122	16.32	563.0
253	.00000	.25000-01	1311.0	.2254	.2998	.3245	.9385	.1798-01	.1249-01	1.772	12.82	563.2
253	.00000	.76500	1362.0	.9300-01	.1242	.1386	.9345	.7680-02	.5152-02	.7230	5.402	564.8
253	.00000	.83700	1364.0	.7550-01	.1008	.1125	.9345	.6233-02	.4182-02	.5870	4.313	564.8
253	.00000	.88400	1365.0	.7700-01	.1033	.1155	.9345	.6400-02	.4269-02	.5920	4.348	566.4
253	.00000	.90700	1366.0	.5680-01	.7730-01	.8700-01	.9345	.4820-02	.3146-02	.4180	3.062	572.2
253	5.0000	.75000-01	1313.0	.1127	.1442	.1541	.9385	.8539-02	.6245-02	1.008	7.245	543.7
253	5.0000	.11000	1314.0	.7540-01	.9580-01	.1021	.9385	.5658-02	.4178-02	.6930	5.160	539.2
253	20.000	.75000-01	1316.0	.1215	.1564	.1673	.9387	.9267-02	.6731-02	1.064	7.632	547.1
253	20.000	.10000+00	1318.0	.1350	.1746	.1870	.9387	.1036-01	.7479-02	1.162	8.603	549.8
253	20.000	.11000	1319.0	.1329	.1715	.1836	.9387	.1017-01	.7361-02	1.152	8.535	548.6
254	22.500	.72400	1367.0	.4980-01	.6530-01	.7230-01	.9345	.4009-02	.2760-02	.4090	3.069	557.2
253	22.500	.74000	1368.0	.5350-01	.6970-01	.7690-01	.9345	.4260-02	.2962-02	.4490	3.318	553.6
253	22.500	.75000	1369.0	.6160-01	.8050-01	.8900-01	.9345	.4930-02	.3413-02	.5120	3.783	555.0
254	22.500	.76500	1370.0	.6110-01	.8110-01	.9030-01	.9345	.5006-02	.3390-02	.4850	3.631	562.2
254	22.500	.77100	1371.0	.5790-01	.7680-01	.8540-01	.9345	.4739-02	.3211-02	.4600	3.385	562.1
253	22.500	.92500	1372.0	.5500-01	.7240-01	.8020-01	.9345	.4444-02	.3046-02	.4470	3.299	558.3
253	22.500	.93900	1374.0	.7240-01	.9620-01	.1072	.9345	.5937-02	.4012-02	.5710	4.203	562.7
253	24.400	.95300	1433.0	.8870-01	.1273	.1404	.9392	.7779-02	.4916-02	.5720	4.156	588.7
253	35.000	.75000-01	1321.0	.1220	.1566	.1670	.9391	.9252-02	.6762-02	1.079	7.748	545.5

IH72, OTS CLEAN, RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
253	35.000	.11000	1322.0	.1340	.1725	.1841	.9391	.1020-01	.7423-02	1.171	8.830	547.3
253	35.600	.95300	1434.0	.8460-01	.1183	.1291	.9396	.7150-02	.4685-02	.5790	4.219	581.6
253	40.000	.95300	1435.0	.8310-01	.1153	.1252	.9398	.6937-02	.4606-02	.5820	4.251	578.7
253	45.000	.74000	1375.0	.6610-01	.8580-01	.9450-01	.9345	.5237-02	.3664-02	.5630	4.238	551.4
253	45.000	.75000	1376.0	.6780-01	.8800-01	.9690-01	.9345	.5369-02	.3758-02	.5780	4.352	551.2
254	45.000	.76500	1377.0	.8040-01	.1059	.1175	.9345	.6517-02	.4458-02	.6520	4.806	559.1
254	45.000	.77100	1378.0	.7350-01	.9690-01	.1075	.9345	.5962-02	.4075-02	.5950	4.382	559.4
254	45.000	.88400	1381.0	.2750-01	.3570-01	.3930-01	.9345	.2181-02	.1524-02	.2340	1.730	551.9
254	45.000	.90700	1382.0	.3570-01	.4650-01	.5120-01	.9345	.2841-02	.1981-02	.3030	2.237	552.7
253	65.000	.11000	1323.0	.2312	.3102	.3317	.9405	.1838-01	.1281-01	1.773	12.80	566.7
253	67.500	.74000	1383.0	.9230-01	.1192	.1310	.9345	.7258-02	.5115-02	.8000	6.029	548.7
253	67.500	.75000	1384.0	.8350-01	.1085	.1195	.9345	.6624-02	.4627-02	.7090	5.335	551.9
254	67.500	.77100	1385.0	.7300-01	.9580-01	.1061	.9345	.5886-02	.4049-02	.5990	4.421	557.4
253	76.000	.10000+00	1324.0	.2344	.3183	.3395	.9413	.1881-01	.1299-01	1.737	12.72	571.4
253	76.000	.14100	1386.0	.1232	.1601	.1765	.9345	.9781-02	.6825-02	1.043	7.713	552.3
253	76.000	.14800	1387.0	.9990-01	.1283	.1407	.9345	.7794-02	.5537-02	.8830	6.553	545.6
253	76.000	.15500	1388.0	.8480-01	.1085	.1188	.9345	.6581-02	.4696-02	.7570	5.623	543.9
253	76.000	.16200	1389.0	.7220-01	.9180-01	.1002	.9345	.5549-02	.4003-02	.6630	4.937	539.4
253	76.000	.25000	1390.0	.2100-01	.2600-01	.2800-01	.9345	.1553-02	.1164-02	.2140	1.639	520.9
253	77.500	.95300	1436.0	.4780-01	.6410-01	.6790-01	.9420	.3760-02	.2648-02	.3670	2.692	566.7
253	77.500	.96700	1437.0	.6020-01	.8110-01	.8590-01	.9420	.4761-02	.3336-02	.4560	3.344	568.5
253	77.500	.99400	1439.0	.5020-01	.6800-01	.7200-01	.9420	.3992-02	.2783-02	.3760	2.757	570.0
254	90.000	.15000-01	1325.0	.2847	.3844	.4061	.9423	.2252-01	.1579-01	2.148	16.02	569.3
253	90.000	.25000-01	1326.0	.3371	.4804	.5139	.9423	.2847-01	.1868-01	2.207	15.78	587.0
254	90.000	.40000-01	1327.0	.2610	.3532	.3734	.9423	.2071-01	.1447-01	1.955	14.33	570.3
253	90.000	.60000-01	1328.0	.1985	.2619	.2754	.9423	.1526-01	.1100-01	1.601	11.06	559.6
253	90.000	.75000-01	1329.0	.1095	.1420	.1488	.9423	.8246-02	.6065-02	.9330	6.370	551.3
254	90.000	.13230	1479.0	.2389	.3531	.4145	.9345	.2299-01	.1325-01	1.445	10.46	596.3
254	90.000	.13390	1480.0	.2040	.2926	.3381	.9345	.1875-01	.1132-01	1.319	9.576	588.8
254	90.000	.13560	1481.0	.1666	.2293	.2596	.9345	.1440-01	.9237-02	1.190	8.696	576.5
254	90.000	.13730	1482.0	.1709	.2319	.2608	.9345	.1447-01	.9477-02	1.270	9.300	571.4
254	90.000	.13890	1483.0	.1458	.1942	.2164	.9345	.1200-01	.8085-02	1.144	8.413	563.9
254	90.000	.55000	1391.0	.9830-01	.1298	.1441	.9345	.7990-02	.5449-02	.7920	5.833	560.1
253	90.000	.65000	1392.0	.7940-01	.1043	.1155	.9345	.6408-02	.4403-02	.6500	4.795	557.7
253	90.000	.74000	1393.0	.1600-01	.2050-01	.2250-01	.9345	.1245-02	.8845-03	.1410	1.063	545.8
253	90.000	.76500	1394.0	.6200-01	.8170-01	.9070-01	.9345	.5024-02	.3437-02	.5020	3.703	558.9
253	90.000	.77100	1395.0	.5400-01	.7050-01	.7790-01	.9345	.4316-02	.2990-02	.4500	3.320	554.8
253	90.000	.81500	1396.0	.4500-01	.5750-01	.6290-01	.9345	.3483-02	.2495-02	.4070	3.073	542.2
253	90.000	.83700	1397.0	.5320-01	.6790-01	.7420-01	.9345	.4113-02	.2945-02	.4790	3.558	542.5
253	90.000	.88400	1398.0	.3760-01	.4750-01	.5170-01	.9345	.2864-02	.2082-02	.3520	2.625	536.0
253	90.000	.89400	1399.0	.4760-01	.5900-01	.6370-01	.9345	.3528-02	.2635-02	.4800	3.606	522.8
253	90.000	.90700	1400.0	.3300-01	.4210-01	.4600-01	.9345	.2547-02	.1929-02	.3000	2.230	541.2
253	90.000	.91700	1401.0	.3280-01	.4190-01	.4590-01	.9345	.2542-02	.1917-02	.2940	2.185	543.2

IH72, OTS CLEAN, RIGHT SRB HI/HREF (RVZR32)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
253	90.000	.93200	1402.0	.3120-01	.4020-01	.4410-01	.9345	.2444-02	.1727-02	.2720	2.015	547.7
253	90.000	.93900	1403.0	.4720-01	.6140-01	.6770-01	.9345	.3749-02	.2617-02	.4000	2.962	552.1
254	95.000	.13560	1484.0	.1813	.2571	.2953	.9345	.1638-01	.1006-01	1.204	8.753	585.7
254	95.000	.13730	1485.0	.1611	.2223	.2520	.9345	.1398-01	.8932-02	1.143	8.350	577.4
254	95.000	.13890	1486.0	.1497	.2033	.2286	.9345	.1268-01	.8304-02	1.112	8.142	571.5
254	95.000	.14560	1487.0	.1474	.1989	.2229	.9345	.1236-01	.8177-02	1.116	8.182	569.0
254	95.000	.14730	1488.0	.1325	.1781	.1994	.9345	.1106-01	.7347-02	1.011	7.422	567.7
253	104.00	.10000+00	1330.0	.2418	.3361	.3542	.9435	.1962-01	.1339-01	1.682	12.27	579.6
253	104.00	.12000	1404.0	.2159	.3131	.3637	.9345	.2015-01	.1196-01	1.359	9.859	591.5
253	104.00	.12700	1405.0	.2562	.3771	.4415	.9345	.2446-01	.1419-01	1.561	11.30	595.1
253	104.00	.13400	1406.0	.1795	.2508	.2859	.9345	.1584-01	.9946-02	1.234	8.993	581.1
253	104.00	.14100	1407.0	.1630	.2212	.2487	.9345	.1378-01	.9033-02	1.211	8.874	571.0
253	104.00	.14800	1408.0	.1464	.1954	.2180	.9345	.1208-01	.8111-02	1.139	8.374	564.6
253	104.00	.15500	1409.0	.1322	.1762	.1965	.9345	.1089-01	.7327-02	1.035	7.606	563.9
253	104.00	.16200	1410.0	.1197	.1585	.1762	.9345	.9762-02	.6632-02	.9550	7.030	561.1
253	104.00	.18000	1412.0	.1016	.1334	.1477	.9345	.8185-02	.5628-02	.8310	6.133	557.4
253	104.00	.18600	1413.0	.9510-01	.1246	.1378	.9345	.7636-02	.5269-02	.7850	5.793	556.2
253	104.00	.19300	1414.0	.8620-01	.1125	.1242	.9345	.6882-02	.4778-02	.7220	5.333	554.1
253	104.00	.20000	1415.0	.8370-01	.1091	.1204	.9345	.6670-02	.4636-02	.7020	5.188	553.7
253	104.00	.25000	1416.0	.6660-01	.8550-01	.9370-01	.9345	.5192-02	.3689-02	.5880	4.439	545.7
254	112.00	.13560	1489.0	.1489	.2037	.2298	.9346	.1275-01	.8260-02	1.083	7.924	574.2
254	112.00	.13730	1490.0	.1574	.2174	.2464	.9346	.1366-01	.8729-02	1.116	8.149	577.5
254	112.00	.13890	1491.0	.1560	.2151	.2435	.9346	.1351-01	.8652-02	1.111	8.119	576.9
254	112.00	.14560	1492.0	.3990-01	.5180-01	.5690-01	.9346	.3158-02	.2215-02	.3430	2.535	550.8
253	112.50	.74000	1417.0	.6530-01	.8980-01	.1015	.9346	.5621-02	.3620-02	.4690	3.430	575.5
253	112.50	.75000	1418.0	.6220-01	.8530-01	.9630-01	.9346	.5334-02	.3447-02	.4490	3.287	574.7
254	112.50	.77100	1419.0	.5000-01	.6830-01	.7700-01	.9346	.4269-02	.2771-02	.3650	2.712	573.8
253	112.50	.92500	1420.0	.4000-01	.5140-01	.5640-01	.9346	.3123-02	.2218-02	.3530	2.620	545.9
253	112.50	.93200	1421.0	.4220-01	.5450-01	.5990-01	.9346	.3319-02	.2338-02	.3650	2.704	549.0
253	112.50	.93900	1422.0	.5830-01	.7580-01	.8360-01	.9346	.4631-02	.3229-02	.4920	3.639	552.7
253	112.50	.95300	1440.0	.9610-01	.1303	.1353	.9449	.7494-02	.5327-02	.7160	5.247	570.7
254	112.50	.96700	1441.0	.7520-01	.1043	.1086	.9449	.6023-02	.4171-02	.5280	3.850	578.9
254	112.50	.99400	1443.0	.6720-01	.9410-01	.9810-01	.9449	.5439-02	.3727-02	.4610	3.356	581.8
253	135.00	.25000-01	1332.0	.3218	.4675	.4855	.9459	.2690-01	.1783-01	2.016	14.62	592.0
254	135.00	.50000-01	1333.0	.2636	.3659	.3779	.9459	.2096-01	.1462-01	1.843	13.45	579.3
253	135.00	.75000-01	1334.0	.1446	.1936	.1991	.9459	.1103-01	.8010-02	1.115	8.332	565.9
253	135.00	.10000+00	1335.0	.1833	.2481	.2555	.9459	.1416-01	.1015-01	1.369	10.03	570.3
253	135.00	.40000	1423.0	.8000-01	.1064	.1183	.9347	.6556-02	.4430-02	.6290	4.703	563.2
254	135.00	.92500	1424.0	.5950-01	.7850-01	.8700-01	.9347	.4827-02	.3298-02	.4790	3.530	560.1
254	140.00	.13560	1494.0	.9070-01	.1191	.1316	.9348	.7301-02	.5030-02	.7440	5.488	557.5
254	140.00	.13730	1495.0	.9140-01	.1206	.1336	.9348	.7409-02	.5069-02	.7380	5.439	559.7
254	140.00	.13890	1496.0	.1007	.1342	.1494	.9348	.8283-02	.5584-02	.7880	5.794	564.2
254	140.00	.14560	1497.0	.1042	.1386	.1541	.9348	.8548-02	.5776-02	.8200	6.027	563.5

IH72, OTS CLEAN, RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
254	150.00	.14230	1499.0	.9670-01	.1285	.1427	.9349	.7914-02	.5362-02	.7640	5.620	562.9
254	180.00	.80000-02	1298.0	.3452	.5090	.5208	.9476	.2888-01	.1914-01	2.098	15.98	595.8
253	180.00	.15000-01	1299.0	.2869	.3961	.4035	.9476	.2238-01	.1591-01	2.037	14.63	577.4
254	180.00	.25000-01	1300.0	.3336	.4805	.4909	.9476	.2720-01	.1849-01	2.132	14.74	589.8
253	180.00	.50000-01	1301.0	.2758	.3831	.3904	.9476	.2165-01	.1530-01	1.926	13.38	579.5
254	180.00	.75000-01	1302.0	.1802	.2420	.2460	.9476	.1363-01	.9985-02	1.379	9.489	567.0
253	225.00	.10000+00	1303.0	.2006	.2831	.2888	.9476	.1601-01	.1112-01	1.347	9.800	584.3
253	263.00	.98000	1425.0	.9990-01	.1504	.1557	.9467	.8626-02	.5532-02	.5800	4.190	600.2
254	263.00	.13600	1336.0	.4960-01	.6250-01	.6790-01	.9345	.3764-02	.2749-02	.4710	3.515	533.9
254	263.00	.20000	1472.0	.6780-01	.8740-01	.9610-01	.9345	.5327-02	.3759-02	.5900	4.372	548.4
254	263.00	.30000	1337.0	.7290-01	.9420-01	.1036	.9345	.5744-02	.4045-02	.6320	4.761	549.1
254	263.00	.40000	1473.0	.5610-01	.7270-01	.8000-01	.9345	.4437-02	.3111-02	.4810	3.559	550.8
254	263.00	.50000	1474.0	.6050-01	.7810-01	.8590-01	.9345	.4763-02	.3353-02	.5230	3.877	549.3
254	263.00	.60000	1475.0	.9020-01	.1154	.1264	.9345	.7010-02	.5004-02	.8080	5.999	544.0
254	263.00	.75000	1338.0	.5760-01	.7470-01	.8230-01	.9345	.4565-02	.3195-02	.4920	3.640	551.4
254	263.00	.81500	1339.0	.5660-01	.7340-01	.8090-01	.9345	.4486-02	.3139-02	.4830	3.571	551.6
254	263.00	.83700	1340.0	.6400-01	.8290-01	.9130-01	.9345	.5061-02	.3549-02	.5490	4.063	550.7
254	263.00	.88400	1341.0	.6530-01	.8440-01	.9290-01	.9345	.5152-02	.3619-02	.5620	4.162	550.1
254	263.00	.89400	1342.0	.6690-01	.8640-01	.9510-01	.9345	.5271-02	.3709-02	.5780	4.280	549.6
253	263.00	.92800	1477.0	.7380-01	.9670-01	.1069	.9345	.5928-02	.4095-02	.6120	4.517	556.0
254	263.00	.93900	1344.0	.1069	.1408	.1561	.9345	.8648-02	.5923-02	.8680	6.399	558.6
254	270.00	.80000-02	1304.0	.2258	.2970	.3120	.9423	.1731-01	.1252-01	1.843	14.56	558.2
253	270.00	.50000-01	1306.0	.2166	.2873	.3025	.9423	.1677-01	.1201-01	1.722	12.07	562.1
254	270.00	.75000-01	1307.0	.1483	.1929	.2022	.9423	.1120-01	.8217-02	1.253	8.827	552.6
253	270.00	.10000+00	1308.0	.1581	.2123	.2240	.9423	.1243-01	.8767-02	1.211	8.889	567.2
253	277.00	.11500	1345.0	.1228	.1643	.1836	.9345	.1017-01	.6805-02	.9500	6.979	565.5
253	277.00	.13600	1346.0	.4410-01	.5550-01	.6030-01	.9345	.3343-02	.2445-02	.4200	3.139	533.2
254	277.00	.30000	1347.0	.7350-01	.9400-01	.1029	.9345	.5699-02	.4073-02	.6590	4.981	543.3
254	277.00	.40000	1464.0	.5910-01	.7600-01	.8340-01	.9345	.4624-02	.3276-02	.5190	3.849	546.9
254	277.00	.60000	1466.0	.6590-01	.8370-01	.9130-01	.9345	.5065-02	.3655-02	.6070	4.515	539.4
254	277.00	.70000	1467.0	.7360-01	.9500-01	.1045	.9345	.5794-02	.4079-02	.6370	4.718	549.2
253	277.00	.75000	1348.0	.7110-01	.9120-01	.9990-01	.9345	.5535-02	.3941-02	.6320	4.693	544.7
253	277.00	.81500	1349.0	.6270-01	.8100-01	.8900-01	.9345	.4932-02	.3476-02	.5440	4.030	548.7
253	277.00	.83700	1350.0	.7400-01	.9630-01	.1062	.9345	.5886-02	.4098-02	.6230	4.607	553.1
253	277.00	.88400	1351.0	.7910-01	.1023	.1125	.9345	.6236-02	.4384-02	.6820	5.048	549.6
253	277.00	.89400	1352.0	.8100-01	.1049	.1155	.9345	.6399-02	.4485-02	.6930	5.128	550.7
254	277.00	.90000	1468.0	.8190-01	.1068	.1180	.9345	.6542-02	.4541-02	.6860	5.065	554.4
254	277.00	.90700	1353.0	.8130-01	.1060	.1171	.9345	.6492-02	.4508-02	.6810	5.034	554.2
254	277.00	.92100	1469.0	.7890-01	.1032	.1141	.9345	.6328-02	.4376-02	.6550	4.837	555.7
254	277.00	.92800	1470.0	.8220-01	.1079	.1194	.9345	.6624-02	.4556-02	.6740	4.973	557.4
254	277.00	.93700	1471.0	.8330-01	.1100	.1221	.9345	.6771-02	.4621-02	.6720	4.952	559.9
253	277.00	.93900	1354.0	.9410-01	.1250	.1391	.9345	.7710-02	.5213-02	.7440	5.471	562.5
254	335.00	.11000	1309.0	.1485	.1947	.2093	.9388	.1161-01	.8233-02	1.223	9.021	556.9

IH72, OTS CLEAN, RIGHT SRB HI/HREF (RVZR32)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
253	337.50	.74000	1355.0	.9110-01	.1191	.1317	.9345	.7297-02	.5047-02	.7560	5.583	555.3
253	337.50	.75000	1356.0	.8810-01	.1152	.1273	.9345	.7054-02	.4879-02	.7310	5.489	555.3
254	337.50	.76500	1357.0	.9870-01	.1316	.1468	.9345	.8141-02	.5476-02	.7730	5.778	564.2
254	337.50	.92500	1359.0	.9440-01	.1256	.1399	.9345	.7757-02	.5235-02	.7440	5.471	563.3
254	337.50	.93200	1360.0	.9820-01	.1310	.1461	.9345	.8102-02	.5448-02	.7690	5.649	564.3
254	337.50	.93900	1361.0	.1132	.1528	.1714	.9345	.9507-02	.6278-02	.8540	6.263	569.3

PARAMETRIC DATA

ALPHA = 5.000 BETA = 5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
255	4.990	5.000	3.010	37.00	705.0	250.8	.9930	6.296	2336.	.3321-03	.2006-06	3.866
256	4.850	4.800	3.010	37.10	705.0	250.8	.9950	6.310	2336.	.3328-03	.2006-06	3.875

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
255	.5538-01	.9221-02
256	.5544-01	.9211-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
256	.00000	.80000-02	1310.0	.2939	.3990	.4347	.9385	.2410-01	.1629-01	2.180	16.69	571.5
255	.00000	.25000-01	1311.0	.2474	.3409	.3736	.9384	.2069-01	.1370-01	1.762	12.66	576.7
255	.00000	.83700	1364.0	.1376	.1872	.2108	.9345	.1167-01	.7618-02	1.013	7.416	572.3
255	.00000	.88400	1365.0	.1251	.1700	.1912	.9345	.1059-01	.6927-02	.9250	6.775	571.7
255	.00000	.90700	1366.0	.1222	.1671	.1886	.9345	.1044-01	.6765-02	.8870	6.491	574.1
255	5.0000	.75000-01	1313.0	.1239	.1612	.1736	.9382	.9612-02	.6860-02	1.044	7.471	553.0
255	5.0000	.11000	1314.0	.9010-01	.1161	.1246	.9382	.6897-02	.4987-02	.7850	5.820	547.8
255	20.000	.75000-01	1316.0	.1296	.1699	.1841	.9376	.1019-01	.7175-02	1.066	7.609	556.8
255	20.000	.10000+00	1318.0	.1394	.1840	.1998	.9376	.1106-01	.7721-02	1.125	8.287	559.6
255	20.000	.11000	1319.0	.1447	.1898	.2057	.9376	.1139-01	.8012-02	1.189	8.771	556.9
256	22.500	.72400	1367.0	.9650-01	.1303	.1462	.9345	.8103-02	.5352-02	.7280	5.431	569.2
255	22.500	.74000	1368.0	.1287	.1759	.1985	.9345	.1099-01	.7125-02	.9360	6.846	573.9
255	22.500	.75000	1369.0	.1302	.1773	.1996	.9345	.1106-01	.7208-02	.9570	7.004	572.5
256	22.500	.76500	1370.0	.1180	.1593	.1788	.9345	.9910-02	.6541-02	.8890	6.627	569.4
256	22.500	.77100	1371.0	.1185	.1601	.1797	.9345	.9963-02	.6569-02	.8910	6.531	569.7
255	22.500	.92500	1372.0	.6950-01	.9240-01	.1029	.9345	.5700-02	.3846-02	.5460	4.018	563.2
255	22.500	.93900	1374.0	.8730-01	.1171	.1310	.9345	.7254-02	.4836-02	.6700	4.922	566.7
255	24.400	.95300	1433.0	.1341	.1936	.2169	.9379	.1201-01	.7428-02	.8530	6.189	590.4
255	35.000	.75000-01	1321.0	.1352	.1769	.1919	.9373	.1063-01	.7488-02	1.121	8.009	555.6
255	35.000	.11000	1322.0	.1478	.1934	.2098	.9373	.1162-01	.8187-02	1.225	9.199	555.6

IH72, OTS CLEAN, RIGHT SRB HI/HREF (RVZR33)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
255	35.600	.95300	1434.0	.1057	.1488	.1654	.9377	.9161-02	.5854-02	.7130	5.189	583.5
255	40.000	.95300	1435.0	.9680-01	.1349	.1494	.9376	.8273-02	.5359-02	.6690	4.878	580.4
255	45.000	.74000	1375.0	.8810-01	.1174	.1310	.9345	.7252-02	.4877-02	.6880	5.142	564.2
255	45.000	.75000	1376.0	.9300-01	.1240	.1383	.9345	.7656-02	.5149-02	.7260	5.429	564.2
256	45.000	.76500	1377.0	.8730-01	.1157	.1286	.9345	.7131-02	.4838-02	.6950	5.115	561.7
256	45.000	.77100	1378.0	.8870-01	.1170	.1299	.9345	.7203-02	.4915-02	.7150	5.268	559.8
256	45.000	.88400	1381.0	.4840-01	.6240-01	.6850-01	.9345	.3799-02	.2683-02	.4220	3.128	548.0
256	45.000	.90700	1382.0	.4080-01	.5260-01	.5780-01	.9345	.3204-02	.2261-02	.3550	2.629	548.4
255	65.000	.11000	1323.0	.2398	.3296	.3637	.9375	.2014-01	.1328-01	1.718	12.35	575.9
255	67.500	.74000	1383.0	.1064	.1415	.1576	.9345	.8727-02	.5891-02	.8370	6.263	563.1
255	67.500	.75000	1384.0	.1096	.1468	.1640	.9345	.9083-02	.6070-02	.8450	6.314	566.0
256	67.500	.77100	1385.0	.1239	.1645	.1832	.9345	.1016-01	.6867-02	.9800	7.207	562.7
255	76.000	.10000+00	1324.0	.2640	.3654	.4032	.9378	.2233-01	.1462-01	1.857	13.56	578.2
255	76.000	.14100	1386.0	.1240	.1654	.1845	.9345	.1021-01	.6867-02	.9680	7.114	564.3
255	76.000	.14800	1387.0	.1052	.1365	.1504	.9345	.8329-02	.5824-02	.8940	6.617	551.7
255	76.000	.15500	1388.0	.1060	.1371	.1509	.9345	.8355-02	.5868-02	.9110	6.743	550.1
255	76.000	.16200	1389.0	.9250-01	.1193	.1310	.9345	.7255-02	.5124-02	.8060	5.971	548.0
255	76.000	.25000	1390.0	.2920-01	.3[illegible]01	.3910-01	.9345	.2164-02	.1617-02	.2950	2.255	522.6
255	77.500	.95300	1436.0	.6270-01	.8320-01	.9010-01	.9383	.4987-02	.3474-02	.4980	3.668	561.8
255	77.500	.96700	1437.0	.5950-01	.7950-01	.8630-01	.9383	.4779-02	.3292-02	.4610	3.385	565.3
255	77.500	.99400	1439.0	.7440-01	.1007	.1098	.9383	.6078-02	.4119-02	.5560	4.077	570.2
256	90.000	.15000-01	1325.0	.3068	.4229	.4630	.9385	.2567-01	.1701-01	2.184	16.23	576.9
255	90.000	.25000-01	1326.0	.3515	.5224	.5885	.9384	.3259-01	.1946-01	2.097	14.92	597.5
256	90.000	.40000-01	1327.0	.2856	.3953	.4335	.9385	.2403-01	.1583-01	2.011	14.68	578.3
255	90.000	.60000-01	1328.0	.2282	.3065	.3329	.9384	.1843-01	.1264-01	1.746	12.01	567.1
255	90.000	.75000-01	1329.0	.1334	.1749	.1885	.9384	.1044-01	.7390-02	1.099	7.485	556.6
256	90.000	.13230	1479.0	.2329	.3441	.4039	.9345	.2239-01	.1291-01	1.409	10.19	596.2
256	90.000	.13390	1480.0	.2160	.3144	.3662	.9345	.2030-01	.1197-01	1.348	9.772	592.7
256	90.000	.13560	1481.0	.1873	.2641	.3027	.9345	.1678-01	.1038-01	1.258	9.153	584.2
256	90.000	.13730	1482.0	.1668	.2309	.2621	.9345	.1453-01	.9248-02	1.175	8.580	578.2
256	90.000	.13890	1483.0	.1448	.1953	.2190	.9345	.1214-01	.8027-02	1.095	8.027	569.0
256	90.000	.55000	1391.0	.1119	.1471	.1630	.9345	.9035-02	.6201-02	.9130	6.735	558.0
256	90.000	.65000	1392.0	.9380-01	.1232	.1364	.9345	.7564-02	.5199-02	.7680	5.667	557.5
255	90.000	.76500	1394.0	.1043	.1387	.1544	.9345	.8550-02	.5778-02	.8230	6.056	562.8
255	90.000	.77100	1395.0	.9590-01	.1259	.1394	.9345	.7721-02	.5311-02	.7860	5.799	557.3
255	90.000	.81500	1396.0	.1920-01	.2420-01	.2640-01	.9345	.1462-02	.1061-02	.1780	1.352	537.1
255	90.000	.83700	1397.0	.1480-01	.1870-01	.2040-01	.9345	.1129-02	.8170-03	.1370	1.018	538.0
255	90.000	.88400	1398.0	.1710-01	.2140-01	.2330-01	.9345	.1289-02	.9452-03	.1640	1.224	531.9
255	90.000	.89400	1399.0	.3570-01	.4420-01	.4780-01	.9345	.2646-02	.1978-02	.3620	2.716	522.4
255	90.000	.90700	1400.0	.1720-01	.2180-01	.2370-01	.9345	.1312-02	.9544-03	.1620	1.205	535.9
255	90.000	.91700	1401.0	.1830-01	.2320-01	.2530-01	.9345	.1402-02	.1016-02	.1700	1.268	537.7
255	90.000	.93200	1402.0	.2210-01	.2820-01	.3090-01	.9345	.1710-02	.1225-02	.1990	1.482	542.5
255	90.000	.93900	1403.0	.3220-01	.4140-01	.4550-01	.9345	.2518-02	.1781-02	.2810	2.086	547.3

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
256	95.000	.13560	1484.0	.1952	.2808	.3250	.9345	.1802-01	.1082-01	1.253	9.092	589.6
256	95.000	.13730	1485.0	.1763	.2478	.2834	.9345	.1571-01	.9774-02	1.195	8.700	583.1
256	95.000	.13890	1486.0	.1544	.2119	.2395	.9345	.1328-01	.8558-02	1.112	8.130	575.4
256	95.000	.14560	1487.0	.1402	.1882	.2105	.9345	.1167-01	.7772-02	1.075	7.891	567.0
256	95.000	.14730	1488.0	.1444	.1924	.2144	.9345	.1189-01	.8007-02	1.133	8.332	563.8
255	104.00	.10000+00	1330.0	.3078	.4364	.4790	.9393	.2653-01	.1704-01	2.039	14.83	585.6
255	104.00	.12000	1404.0	.2344	.3438	.4020	.9345	.2226-01	.1298-01	1.438	10.42	594.5
255	104.00	.12700	1405.0	.2493	.3637	.4240	.9345	.2348-01	.1380-01	1.547	11.21	593.2
255	104.00	.13400	1406.0	.1997	.2871	.3322	.9345	.1840-01	.1106-01	1.280	9.293	589.5
255	104.00	.14100	1407.0	.1759	.2444	.2780	.9345	.1539-01	.9739-02	1.225	8.935	579.5
255	104.00	.14800	1408.0	.1415	.1897	.2120	.9345	.1174-01	.7837-02	1.089	7.995	566.4
255	104.00	.15500	1409.0	.1454	.1936	.2157	.9345	.1195-01	.8054-02	1.142	8.398	563.5
255	104.00	.16200	1410.0	.1421	.1898	.2118	.9345	.1173-01	.7869-02	1.104	8.116	564.9
255	104.00	.18000	1412.0	.1044	.1377	.1529	.9345	.8466-02	.5779-02	.8410	6.196	559.7
255	104.00	.18600	1413.0	.1008	.1323	.1465	.9345	.8114-02	.5583-02	.8270	6.101	557.2
255	104.00	.19300	1414.0	.9570-01	.1250	.1381	.9345	.7646-02	.5300-02	.7980	5.894	554.7
255	104.00	.20000	1415.0	.9780-01	.1277	.1411	.9345	.7815-02	.5416-02	.8150	6.019	554.8
256	112.00	.13560	1489.0	.7050-01	.9040-01	.9920-01	.9345	.5491-02	.3903-02	.6240	4.705	545.5
256	112.00	.13730	1490.0	.1688	.2303	.2596	.9345	.1439-01	.9360-02	1.237	9.053	573.2
256	112.00	.13890	1491.0	.1777	.2446	.2769	.9345	.1535-01	.9849-02	1.269	9.273	576.5
256	112.00	.14560	1492.0	.1770	.2435	.2757	.9345	.1528-01	.9815-02	1.267	9.261	576.2
255	112.50	.74000	1417.0	.4270-01	.5530-01	.6090-01	.9345	.3377-02	.2368-02	.3660	2.711	550.7
255	112.50	.75000	1418.0	.7180-01	.9730-01	.1093	.9345	.6054-02	.3976-02	.5350	3.922	570.7
256	112.50	.77100	1419.0	.7250-01	.9820-01	.1103	.9345	.6108-02	.4017-02	.5420	3.973	570.3
255	112.50	.92500	1420.0	.5880-01	.7840-01	.8740-01	.9345	.4844-02	.3262-02	.4620	3.452	563.8
255	112.50	.93200	1421.0	.2540-01	.3240-01	.3540-01	.9345	.1960-02	.1405-02	.2290	1.702	542.3
255	112.50	.93900	1422.0	.2420-01	.3110-01	.3410-01	.9345	.1887-02	.1341-02	.2140	1.588	545.6
255	112.50	.95300	1440.0	.2850-01	.3680-01	.4050-01	.9345	.2243-02	.1576-02	.2450	1.814	549.8
256	112.50	.96700	1441.0	.3970-01	.5280-01	.5640-01	.9406	.3122-02	.2197-02	.3110	2.287	563.7
256	112.50	.99400	1443.0	.5360-01	.7170-01	.7660-01	.9406	.4245-02	.2973-02	.4150	3.052	565.6
255	135.00	.25000-01	1332.0	.4410-01	.5960-01	.6390-01	.9406	.3541-02	.2445-02	.3310	2.424	570.0
256	135.00	.50000-01	1333.0	.3455	.5168	.5597	.9423	.3099-01	.1913-01	2.035	14.71	598.9
255	135.00	.75000-01	1334.0	.2843	.3975	.4236	.9423	.2348-01	.1576-01	1.952	14.22	581.5
255	135.00	.10000+00	1335.0	.1678	.2261	.2389	.9423	.1323-01	.9295-02	1.272	9.490	568.4
255	135.00	.40000	1423.0	.1864	.2529	.2677	.9423	.1483-01	.1032-01	1.383	10.13	571.3
256	135.00	.92500	1424.0	.8170-01	.1078	.1196	.9345	.6624-02	.4524-02	.6590	4.941	559.5
256	140.00	.13560	1494.0	.2720-01	.3500-01	.3850-01	.9345	.2132-02	.1509-02	.2390	1.769	547.2
256	140.00	.13730	1495.0	.1005	.1304	.1437	.9345	.7965-02	.5570-02	.8560	6.329	551.7
256	140.00	.13890	1496.0	.1002	.1307	.1443	.9345	.7997-02	.5557-02	.8410	6.218	553.9
256	140.00	.14560	1497.0	.1182	.1562	.1735	.9345	.9619-02	.6552-02	.9490	6.989	560.5
256	150.00	.14230	1499.0	.1223	.1620	.1802	.9345	.9989-02	.6778-02	.9740	7.168	561.6
256	180.00	.80000-02	1298.0	.1096	.1441	.1596	.9346	.8850-02	.6076-02	.8950	6.600	558.0
				.3810	.5762	.5945	.9474	.3296-01	.2112-01	2.185	16.59	601.9

IH72. OTS CLEAN. RIGHT SRB HI/HREF (RVZR33)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
256	180.00	.15000-01	1299.0	.3320	.4669	.4771	.9474	.2645-01	.1841-01	2.247	16.10	583.2
255	180.00	.25000-01	1300.0	.3731	.5529	.5665	.9475	.3137-01	.2066-01	2.241	15.43	596.8
256	180.00	.50000-01	1301.0	.3152	.4386	.4479	.9474	.2483-01	.1747-01	2.189	15.21	580.0
255	180.00	.75000-01	1302.0	.1934	.2621	.2669	.9475	.1478-01	.1071-01	1.439	9.886	570.9
256	180.00	.10000+00	1303.0	.2212	.3061	.3124	.9474	.1732-01	.1226-01	1.559	11.38	578.2
255	225.00	.98000	1425.0	.9950-01	.1623	.1604	.9510	.8882-02	.5508-02	.5010	3.596	614.2
255	263.00	.13600	1336.0	.5940-01	.7590-01	.8280-01	.9351	.4585-02	.3290-02	.5330	3.960	543.3
256	263.00	.20000	1472.0	.8310-01	.1081	.1187	.9351	.6580-02	.4608-02	.7040	5.202	552.6
256	263.00	.30000	1337.0	.9450-01	.1242	.1371	.9351	.7599-02	.5241-02	.7730	5.797	557.8
256	263.00	.40000	1473.0	.7930-01	.1044	.1153	.9351	.6394-02	.4396-02	.6440	4.745	558.8
256	263.00	.50000	1474.0	.7920-01	.1038	.1145	.9351	.6346-02	.4388-02	.6510	4.804	556.9
256	263.00	.60000	1475.0	.7500-01	.9940-01	.1101	.9351	.6103-02	.4158-02	.5970	4.397	561.7
256	263.00	.75000	1338.0	.8770-01	.1170	.1299	.9351	.7204-02	.4860-02	.6840	5.026	564.6
256	263.00	.81500	1339.0	.8520-01	.1142	.1270	.9351	.7042-02	.4725-02	.6580	4.829	566.1
256	263.00	.83700	1340.0	.8450-01	.1135	.1264	.9351	.7008-02	.4682-02	.6460	4.738	567.4
256	263.00	.88400	1341.0	.7040-01	.9410-01	.1046	.9351	.5800-02	.3900-02	.5450	4.004	565.6
256	263.00	.89400	1342.0	.6160-01	.8220-01	.9120-01	.9351	.5058-02	.3414-02	.4810	3.536	564.4
256	263.00	.92800	1477.0	.7160-01	.9620-01	.1072	.9351	.5943-02	.3968-02	.5470	4.012	567.6
255	263.00	.93900	1344.0	.1250	.1724	.1942	.9351	.1075-01	.6923-02	.8890	6.494	576.9
256	270.00	.80000-02	1304.0	.2582	.3468	.3532	.9474	.1958-01	.1431-01	1.976	15.54	567.3
256	270.00	.50000-01	1306.0	.2639	.3584	.3653	.9474	.2025-01	.1463-01	1.958	13.66	571.5
255	270.00	.75000-01	1307.0	.1721	.2295	.2334	.9475	.1292-01	.9531-02	1.345	9.414	564.2
256	270.00	.10000+00	1308.0	.1981	.2681	.2732	.9474	.1514-01	.1098-01	1.484	10.87	570.2
255	270.00	.11500	1345.0	.1341	.1846	.2081	.9350	.1152-01	.7427-02	.9580	7.000	576.3
255	277.00	.13600	1346.0	.5350-01	.6820-01	.7440-01	.9349	.4121-02	.2962-02	.4840	3.599	541.8
255	277.00	.30000	1347.0	.8890-01	.1165	.1285	.9349	.7117-02	.4921-02	.7330	5.498	556.4
256	277.00	.40000	1464.0	.7170-01	.9380-01	.1035	.9349	.5736-02	.3976-02	.5960	4.398	555.5
256	277.00	.60000	1466.0	.7880-01	.1034	.1141	.9349	.6328-02	.4371-02	.6490	4.792	556.7
256	277.00	.70000	1467.0	.8210-01	.1086	.1204	.9349	.6675-02	.4551-02	.6570	4.839	560.9
255	277.00	.75000	1348.0	.7740-01	.1028	.1141	.9349	.6317-02	.4284-02	.6110	4.497	562.6
255	277.00	.81500	1349.0	.8090-01	.1084	.1208	.9349	.6687-02	.4480-02	.6230	4.578	566.1
255	277.00	.83700	1350.0	.6740-01	.9070-01	.1012	.9349	.5605-02	.3735-02	.5140	3.773	567.6
255	277.00	.88400	1351.0	.6310-01	.8380-01	.9310-01	.9349	.5155-02	.3493-02	.4970	3.659	562.9
255	277.00	.89400	1352.0	.6690-01	.8910-01	.9910-01	.9349	.5487-02	.3702-02	.5230	3.845	564.0
256	277.00	.90000	1468.0	.6710-01	.8940-01	.9930-01	.9349	.5507-02	.3720-02	.5270	3.873	563.7
256	277.00	.90700	1353.0	.7480-01	.9970-01	.1108	.9349	.6142-02	.4149-02	.5880	4.321	563.7
256	277.00	.92100	1469.0	.7650-01	.1023	.1140	.9349	.6320-02	.4239-02	.5910	4.344	565.8
256	277.00	.92800	1470.0	.8450-01	.1136	.1269	.9349	.7033-02	.4687-02	.6460	4.739	567.6
256	277.00	.93700	1471.0	.9520-01	.1283	.1434	.9349	.7948-02	.5276-02	.7210	5.288	568.6
255	277.00	.93900	1354.0	.1448	.1995	.2252	.9349	.1247-01	.8020-02	1.032	7.540	576.6
256	335.00	.11000	1309.0	.1674	.2213	.2361	.9403	.1309-01	.9283-02	1.344	9.900	560.5
255,	337.50	.74000	1355.0	.1068	.1414	.1572	.9345	.8704-02	.5914-02	.8520	6.276	561.1
255	337.50	.75000	1356.0	.1147	.1518	.1687	.9345	.9341-02	.6350-02	.9160	6.861	561.0

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN, RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
256	337.50	.76500	1357.0	.1509	.2013	.2245	.9345	.1245-01	.8365-02	1.178	8.806	564.5
256	337.50	.92500	1359.0	.1448	.1954	.2192	.9345	.1215-01	.8026-02	1.092	8.009	569.2
256	337.50	.93200	1360.0	.1501	.2035	.2287	.9345	.1268-01	.8320-02	1.118	8.189	571.0
256	337.50	.93900	1361.0	.1643	.2247	.2535	.9345	.1406-01	.9110-02	1.196	8.751	574.0

RIGHT SRB

PARAMETRIC DATA

ALPHA = -5.000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
271	-5.050	-9.100	4.020	72.90	741.0	175.1	.4670	5.288	2606.	.2240-03	.1409-06	4.143
272	-5.030	-9.000	4.020	72.90	741.0	175.1	.4680	5.291	2607.	.2241-03	.1410-06	4.143

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
271	.5113-01	.1131-01
272	.5115-01	.1131-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
272	.00000	.80000-02	1310.0	.2984	.4004	.4378	.9375	.2239-01	.1526-01	2.220	16.80	595.6
271	.00000	.25000-01	1311.0	.2385	.3205	.3505	.9375	.1792-01	.1220-01	1.767	12.58	596.0
271	.00000	.83700	1364.0	.3500-01	.4330-01	.4970-01	.9228	.2541-02	.1792-02	.3470	2.577	546.9
271	.00000	.88400	1365.0	.4220-01	.5190-01	.5930-01	.9228	.3034-02	.2156-02	.4260	3.164	543.3
271	.00000	.90700	1366.0	.3680-01	.4530-01	.5180-01	.9228	.2647-02	.1881-02	.3720	2.760	543.3
271	5.0000	.75000-01	1313.0	.1170	.1488	.1587	.9385	.8117-02	.5981-02	1.035	7.347	567.9
271	5.0000	.11000	1314.0	.6700-02	.8200-02	.8600-02	.9385	.4404-03	.3422-03	.7000-01	.5210	536.7
271	20.000	.75000-01	1316.0	.1300	.1670	.1756	.9414	.8981-02	.6647-02	1.111	7.866	573.7
271	20.000	.10000+00	1318.0	.1533	.1988	.2095	.9414	.1071-01	.7836-02	1.267	9.245	579.2
271	20.000	.11000	1319.0	.1674	.2165	.2281	.9414	.1166-01	.8558-02	1.396	10.20	577.7
272	22.500	.72400	1367.0	.4140-01	.5120-01	.5830-01	.9241	.2984-02	.2116-02	.4090	3.084	547.8
271	22.500	.74000	1368.0	.3810-01	.4720-01	.5390-01	.9241	.2754-02	.1950-02	.3750	2.782	548.3
271	22.500	.75000	1369.0	.3750-01	.4640-01	.5300-01	.9241	.2711-02	.1917-02	.3680	2.724	549.0
272	22.500	.76500	1370.0	.3790-01	.4690-01	.5340-01	.9241	.2731-02	.1938-02	.3750	2.830	547.5
272	22.500	.77100	1371.0	.3930-01	.4870-01	.5550-01	.9241	.2840-02	.2013-02	.3890	2.880	548.0
271	22.500	.92500	1372.0	.2140-01	.2610-01	.2940-01	.9241	.1503-02	.1093-02	.2250	1.680	534.9
271	22.500	.93900	1374.0	.2850-01	.3490-01	.3940-01	.9241	.2016-02	.1458-02	.2960	2.206	537.7
271	24.400	.95300	1433.0	.7410-01	.9350-01	.9700-01	.9431	.4958-02	.3791-02	.6790	5.001	561.6
271	35.000	.75000-01	1321.0	.1296	.1662	.1724	.9436	.8813-02	.6628-02	1.116	7.909	572.4
271	35.000	.11000	1322.0	.1751	.2252	.2338	.9436	.1195-01	.8953-02	1.490	11.08	574.5

IH72. OTS CLEAN. RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
271	35.600	.95300	1434.0	.4200-01	.5240-01	.5380-01	.9447	.2751-02	.2145-02	.3990	2.949	554.7
271	40.000	.95300	1435.0	.3200-01	.3980-01	.4080-01	.9452	.2084-02	.1636-02	.3090	2.285	552.0
271	45.000	.74000	1375.0	.3710-01	.4580-01	.5190-01	.9252	.2653-02	.1898-02	.3690	2.785	546.3
271	45.000	.75000	1376.0	.3610-01	.4460-01	.5040-01	.9252	.2578-02	.1846-02	.3600	2.715	545.9
272	45.000	.76500	1377.0	.2800-01	.3460-01	.3910-01	.9252	.2002-02	.1435-02	.2810	2.084	545.4
272	45.000	.77100	1378.0	.2760-01	.3400-01	.3840-01	.9252	.1964-02	.1409-02	.2770	2.053	544.9
272	45.000	.88400	1381.0	.1840-01	.2230-01	.2490-01	.9252	.1271-02	.9401-03	.2000	1.498	528.3
272	45.000	.90700	1382.0	.1480-01	.1790-01	.2000-01	.9252	.1021-02	.7563-03	.1620	1.213	527.0
271	65.000	.11000	1323.0	.1667	.2183	.2249	.9452	.1150-01	.8524-02	1.336	9.568	584.1
271	67.500	.74000	1383.0	.4570-01	.5620-01	.6340-01	.9254	.3242-02	.2335-02	.4610	3.483	543.4
271	67.500	.75000	1384.0	.3770-01	.4650-01	.5250-01	.9254	.2683-02	.1929-02	.3790	2.863	544.3
272	67.500	.77100	1385.0	.3290-01	.4050-01	.4570-01	.9254	.2338-02	.1682-02	.3320	2.463	544.0
271	76.000	.10000+00	1324.0	.1256	.1633	.1687	.9447	.8626-02	.6420-02	1.028	7.497	580 7
271	76.000	.14100	1386.0	.1229	.1546	.1772	.9252	.9062-02	.6285-02	1.136	8.370	560.1
271	76.000	.14800	1387.0	.1069	.1330	.1513	.9252	.7737-02	.5468-02	1.033	7.642	551.9
271	76.000	.15500	1388.0	.8880-01	.1097	.1242	.9252	.6350-02	.4540-02	.8820	6.539	546.6
271	76.000	.16200	1389.0	.7790-01	.9590-01	.1083	.9252	.5535-02	.3984-02	.7880	5.851	543.2
271	76.000	.25000	1390.0	.4990-01	.6030-01	.6730-01	.9252	.3440-02	.2552-02	.5470	4.171	526.4
271	77.500	.95300	1436.0	.1230-01	.1510-01	.1540-01	.9456	.7894-03	.6271-03	.1230	.9120	544.9
271	77.500	.96700	1437.0	.3230-01	.4000-01	.4090-01	.9456	.2089-02	.1652-02	.3190	2.360	548.1
271	77.500	.99400	1439.0	.5360-01	.6700-01	.6850-01	.9456	.3504-02	.2740-02	.5070	3.741	555.9
272	90.000	.15000-01	1325.0	.2792	.3728	.3907	.9432	.1998-01	.1428-01	2.106	15.52	593.6
271	90.000	.25000-01	1326.0	.2353	.3210	.3375	.9433	.1726-01	.1203-01	1.669	11.84	602.1
272	90.000	.40000-01	1327.0	.1866	.2453	.2562	.9432	.1311-01	.9546-02	1.479	10.75	586.2
271	90.000	.60000-01	1328.0	.1187	.1516	.1575	.9433	.8054-02	.6069-02	1.035	7.108	570.4
271	90.000	.75000-01	1329.0	.5500-01	.6870-01	.7110-01	.9433	.3637-02	.2814-02	.5220	3.560	555.2
272	90.000	.13230	1479.0	.1890	.2510	.3010	.9246	.1540-01	.9666-02	1.450	10.52	591.1
272	90.000	.13390	1480.0	.1425	.1857	.2194	.9246	.1122-01	.7288-02	1.161	8.461	581.8
272	90.000	.13560	1481.0	.1174	.1506	.1758	.9246	.8994-02	.6004-02	1.009	7.384	573.1
272	90.000	.13730	1482.0	.1147	.1462	.1698	.9246	.8686-02	.5369-02	1.011	7.412	568.9
272	90.000	.13890	1483.0	.9740-01	.1225	.1408	.9246	.7204-02	.4985-02	.9040	6.658	559.8
272	90.000	.55000	1391.0	.6000-01	.7370-01	.8330-01	.9246	.4261-02	.3069-02	.6130	4.555	541.5
272	90.000	.65000	1392.0	.4790-01	.5870-01	.6620-01	.9246	.3388-02	.2452-02	.4950	3.687	539.1
271	90.000	.76500	1394.0	.2600-01	.3190-01	.3610-01	.9247	.1847-02	.1328-02	.2640	1.962	542.1
271	90.000	.77100	1395.0	.2750-01	.3370-01	.3800-01	.9247	.1942-02	.1405-02	.2840	2.115	538.8
271	90.000	.81500	1396.0	.9200-02	.1110-01	.1240-01	.9247	.6362-03	.4714-03	.1020	.7740	525.5
271	90.000	.83700	1397.0	.3700-02	.4500-02	.5000-02	.9247	.2542-03	.1885-03	.4100-01	.3050	524.9
271	90.000	.88400	1398.0	.4700-02	.5600-02	.6300-02	.9247	.3205-03	.2392-03	.5300-01	.3950	520.9
271	90.000	.89400	1399.0	.2110-01	.2520-01	.2800-01	.9247	.1433-02	.1079-02	.2440	1.839	514.8
271	90.000	.90700	1400.0	.3700-02	.4500-02	.5000-02	.9247	.2564-03	.1905-03	.4100-01	.3100	523.9
271	90.000	.91700	1401.0	.4700-02	.5700-02	.6300-02	.9247	.3234-03	.2397-03	.5200-01	.3880	525.0
271	90.000	.93200	1402.0	.9400-02	.1130-01	.1270-01	.9247	.6483-03	.4789-03	.1020	.7660	527.3
271	90.000	.93900	1403.0	.1560-01	.1890-01	.2120-01	.9247	.1084-02	.7965-03	.1680	1.254	530.3

IH72, OTS CLEAN, RIGHT SRB HI/HREF (RVZR34)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
272	95.000	.13560	1484.0	.9130-01	.1166	.1360	.9244	.6956-02	.4669-02	.7960	5.831	570.7
272	95.000	.13730	1485.0	.8110-01	.1024	.1184	.9244	.6058-02	.4146-02	.7370	5.416	563.5
272	95.000	.13890	1486.0	.7600-01	.9520-01	.1094	.9244	.5597-02	.3886-02	.7130	5.255	557.8
272	95.000	.14560	1487.0	.5740-01	.7120-01	.8130-01	.9244	.4158-02	.2934-02	.5580	4.133	550.8
272	95.000	.14730	1488.0	.5240-01	.6470-01	.7370-01	.9244	.3769-02	.2678-02	.5190	3.846	547.4
271	104.00	.10000+00	1330.0	.1008	.1319	.1396	.9411	.7136-02	.5154-02	.8100	5.897	583.7
271	104.00	.12000	1404.0	.1079	.1388	.1633	.9239	.8352-02	.5515-02	.9160	6.694	574.9
271	104.00	.12700	1405.0	.1911	.2498	.2974	.9239	.1521-01	.9773-02	1.542	11.23	583.1
271	104.00	.13400	1406.0	.7710-01	.9770-01	.1136	.9239	.5810-02	.3943-02	.6920	5.085	565.3
271	104.00	.14100	1407.0	.6860-01	.8570-01	.9860-01	.9239	.5041-02	.3508-02	.6500	4.801	555.5
271	104.00	.14800	1408.0	.5330-01	.6590-01	.7510-01	.9239	.3839-02	.2726-02	.5310	3.937	546.2
271	104.00	.15500	1409.0	.4800-01	.5910-01	.6710-01	.9239	.3433-02	.2456-02	.4870	3.616	542.7
271	104.00	.16200	1410.0	.3840-01	.4710-01	.5340-01	.9239	.2730-02	.1961-02	.3930	2.922	540.6
271	104.00	.18000	1412.0	.2640-01	.3230-01	.3640-01	.9239	.1863-02	.1352-02	.2780	2.073	535.4
271	104.00	.18600	1413.0	.2440-01	.2970-01	.3350-01	.9239	.1714-02	.1246-02	.2580	1.923	534.1
271	104.00	.19300	1414.0	.2500-01	.3040-01	.3430-01	.9239	.1753-02	.1278-02	.2660	1.984	532.9
271	104.00	.20000	1415.0	.2300-01	.2790-01	.3150-01	.9239	.1610-02	.1174-02	.2440	1.826	532.6
271	104.00	.25000	1416.0	.1610-01	.1950-01	.2190-01	.9239	.1118-02	.8231-03	.1760	1.341	527.0
272	112.00	.13560	1489.0	.4900-01	.6080-01	.6980-01	.9234	.3569-02	.2505-02	.4770	3.531	550.7
272	112.00	.13730	1490.0	.3810-01	.4730-01	.5430-01	.9234	.2777-02	.1951-02	.3720	2.757	550.2
272	112.00	.13890	1491.0	.2850-01	.3530-01	.4040-01	.9234	.2068-02	.1460-02	.2820	2.089	548.0
272	112.00	.14560	1492.0	.8300-02	.1010-01	.1150-01	.9234	.5874-03	.4251-03	.8700-01	.6510	535.6
271	112.50	.74000	1417.0	.3420-01	.4190-01	.4770-01	.9234	.2440-02	.1747-02	.3490	2.598	540.9
271	112.50	.75000	1418.0	.3260-01	.4010-01	.4560-01	.9234	.2332-02	.1669-02	.3340	2.482	541.0
272	112.50	.77100	1419.0	.2880-01	.3530-01	.4010-01	.9234	.2051-02	.1474-02	.2970	2.251	539.3
271	112.50	.92500	1420.0	.7700-02	.9300-02	.1050-01	.9234	.5352-03	.3940-03	.8500-01	.6360	525.7
271	112.50	.93200	1421.0	.9800-02	.1180-01	.1330-01	.9234	.6809-03	.5000-03	.1070	.8000	527.2
271	112.50	.93900	1422.0	.1730-01	.2100-01	.2370-01	.9234	.1210-02	.8850-03	.1870	1.398	529.7
271	112.50	.95300	1440.0	.3000-01	.3700-01	.3870-01	.9404	.1979-02	.1533-02	.3000	2.229	544.9
272	112.50	.96700	1441.0	.7560-01	.9340-01	.9790-01	.9403	.5008-02	.3865-02	.7490	5.551	547.4
272	112.50	.99400	1443.0	.9500-01	.1186	.1246	.9403	.6371-02	.4860-02	.9060	6.694	554.7
271	135.00	.25000-01	1332.0	.1635	.2170	.2409	.9349	.1232-01	.8358-02	1.255	9.102	590.7
272	135.00	.50000-01	1333.0	.1094	.1410	.1545	.9349	.7904-02	.5598-02	.9270	6.773	575.6
271	135.00	.75000-01	1334.0	.2970-01	.3720-01	.4030-01	.9349	.2062-02	.1516-02	.2760	2.073	558.5
271	135.00	.10000+00	1335.0	.6340-01	.8000-01	.8690-01	.9349	.4442-02	.3242-02	.5790	4.260	562.3
271	135.00	.40000	1423.0	.3660-01	.4510-01	.5160-01	.9223	.2640-02	.1874-02	.3720	2.810	542.4
272	135.00	.92500	1424.0	.1790-01	.2170-01	.2460-01	.9223	.1259-02	.9158-03	.1930	1.446	530.0
272	140.00	.13560	1494.0	.4050-01	.4940-01	.5630-01	.9221	.2879-02	.2073-02	.4270	3.188	535.0
272	140.00	.13730	1495.0	.3540-01	.4310-01	.4910-01	.9221	.2513-02	.1809-02	.3730	2.781	535.1
272	140.00	.13890	1496.0	.2860-01	.3490-01	.3980-01	.9221	.2037-02	.1463-02	.3000	2.238	536.0
272	140.00	.14560	1497.0	.2270-01	.2770-01	.3160-01	.9221	.1616-02	.1159-02	.2360	1.762	537.2
272	150.00	.14230	1499.0	.2650-01	.3240-01	.3690-01	.9220	.1886-02	.1358-02	.2800	2.093	534.6
272	180.00	.80000-02	1298.0	.2355	.3223	.3873	.9272	.1981-01	.1205-01	1.658	12.58	603.5

IH72, OTS CLEAN, RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
272	180.00	.15000-01	1299.0	.1523	.1961	.2258	.9272	.1155-01	.7790-02	1.291	9.286	575.3
271	180.00	.25000-01	1300.0	.1315	.1710	.1982	.9272	.1013-01	.6722-02	1.077	7.480	590.6
272	180.00	.50000-01	1301.0	.6720-01	.1112	.1272	.9272	.6504-02	.4461-02	.7660	5.352	569.3
271	180.00	.75000-01	1302.0	.2100-01	.2630-01	.2970-01	.9272	.1519-02	.1073-02	.1970	1.365	556.9
272	180.00	.10000+00	1303.0	.4750-01	.6070-01	.6950-01	.9272	.3555-02	.2432-02	.4150	3.045	570.3
271	225.00	.98000	1425.0	.1027	.1352	.1614	.9244	.8251-02	.5250-02	.8080	5.873	587.0
271	263.00	.13600	1336.0	.2530-01	.3080-01	.3500-01	.9220	.1789-02	.1296-02	.2720	2.031	531.1
272	263.00	.20000	1472.0	.3000-02	.3600-02	.4200-02	.9220	.2126-03	.1532-03	.3200-01	.2370	534.2
272	263.00	.30000	1337.0	.1870-01	.2040-01	.2320-01	.9220	.1189-02	.8524-03	.1740	1.319	536.9
272	263.00	.40000	1473.0	.2310-01	.2830-01	.3250-01	.9220	.1661-02	.1181-02	.2360	1.755	541.2
272	263.00	.50000	1474.0	.9800-02	.1200-01	.1370-01	.9220	.7005-03	.4996-03	.1010	.7500	539.5
272	263.00	.60000	1475.0	.1340-01	.1630-01	.1870-01	.9220	.9560-03	.6831-03	.1380	1.030	538.6
272	263.00	.75000	1338.0	.2160-01	.2670-01	.3070-01	.9220	.1572-02	.1105-02	.2150	1.594	546.6
272	263.00	.81500	1339.0	.1710-01	.2120-01	.2440-01	.9220	.1249-02	.8743-03	.1680	1.248	548.5
272	263.00	.83700	1340.0	.1810-01	.2240-01	.2590-01	.9220	.1325-02	.9251-03	.1770	1.311	549.7
272	263.00	.88400	1341.0	.1320-01	.1630-01	.1890-01	.9220	.9655-03	.6732-03	.1290	.9520	550.2
272	263.00	.89400	1342.0	.1120-01	.1390-01	.1610-01	.9220	.8221-03	.5738-03	.1100	.8130	549.8
271	263.00	.92900	1477.0	.2130-01	.2650-01	.3070-01	.9220	.1568-02	.1091-02	.2070	1.531	551.3
272	263.00	.93900	1344.0	.6400-01	.8000-01	.9310-01	.9220	.4763-02	.3270-02	.6030	4.451	556.4
272	270.00	.80000-02	1304.0	.1868	.2380	.2765	.9246	.1415-01	.9557-02	1.647	12.94	568.8
272	270.00	.50000-01	1306.0	.8610-01	.1098	.1275	.9246	.6524-02	.4406-02	.7580	5.298	569.0
271	270.00	.75000-01	1307.0	.3070-01	.3850-01	.4440-01	.9245	.2268-02	.1568-02	.2840	1.994	559.6
272	270.00	.10000+00	1308.0	.6380-01	.8150-01	.9490-01	.9246	.4853-02	.3262-02	.5560	4.077	570.6
271	270.00	.11500	1345.0	.6530-01	.8170-01	.9510-01	.9220	.4863-02	.3337-02	.6150	4.536	556.7
271	277.00	.13600	1346.0	.1940-01	.2360-01	.2680-01	.9220	.1372-02	.9943-03	.2090	1.561	530.9
271	277.00	.30000	1347.0	.1430-01	.1750-01	.2000-01	.9220	.1025-02	.7328-03	.1490	1.125	538.2
272	277.00	.40000	1464.0	.2030-01	.2490-01	.2850-01	.9220	.1458-02	.1037-02	.2080	1.545	540.9
272	277.00	.60000	1466.0	.1850-01	.2260-01	.2590-01	.9220	.1325-02	.9447-03	.1900	1.418	539.5
272	277.00	.70000	1467.0	.1850-01	.2290-01	.2640-01	.9220	.1348-02	.9476-03	.1840	1.368	546.4
271	277.00	.75000	1348.0	.1870-01	.2320-01	.2670-01	.9220	.1368-02	.9554-03	.1830	1.356	549.2
271	277.00	.81500	1349.0	.2210-01	.2750-01	.3190-01	.9220	.1630-02	.1129-02	.2120	1.570	552.8
271	277.00	.83700	1350.0	.2540-01	.3180-01	.3700-01	.9220	.1890-02	.1301-02	.2410	1.781	555.4
271	277.00	.88400	1351.0	.2120-01	.2640-01	.3060-01	.9220	.1562-02	.1084-02	.2050	1.515	551.9
271	277.00	.89400	1352.0	.2110-01	.2620-01	.3040-01	.9220	.1555-02	.1079-02	.2040	1.505	552.1
272	277.00	.90000	1468.0	.1990-01	.2480-01	.2870-01	.9220	.1470-02	.1019-02	.1920	1.421	552.6
272	277.00	.90700	1353.0	.2250-01	.2800-01	.3250-01	.9220	.1660-02	.1152-02	.2170	1.607	552.5
272	277.00	.92100	1469.0	.2530-01	.3140-01	.3640-01	.9220	.1863-02	.1292-02	.2430	1.800	552.7
272	277.00	.92800	1470.0	.2920-01	.3630-01	.4210-01	.9220	.2153-02	.1494-02	.2820	2.086	552.3
272	277.00	.93700	1471.0	.3350-01	.4170-01	.4830-01	.9220	.2473-02	.1713-02	.3220	2.383	553.0
271	277.00	.93900	1354.0	.5890-01	.7400-01	.8640-01	.9220	.4417-02	.3012-02	.5480	4.036	559.1
272	335.00	.11000	1309.0	.1372	.1781	.1990	.9324	.1018-01	.7020-02	1.134	8.269	579.7
271	337.50	.74000	1355.0	.2240-01	.2770-01	.3190-01	.9220	.1631-02	.1146-02	.2220	1.650	546.7
271	337.50	.75000	1356.0	.2160-01	.2670-01	.3080-01	.9220	.1573-02	.1105-02	.2140	1.616	546.8

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN, RIGHT SRB H1/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
272	337.50	.76500	1357.0	.1720-01	.2130-01	.2450-01	.9220	.1253-02	.8796-03	.1700	1.284	547.4
272	337.50	.92500	1359.0	.2470-01	.3040-01	.3490-01	.9220	.1787-02	.1263-02	.2490	1.848	544.1
272	337.50	.93200	1360.0	.2820-01	.3480-01	.4000-01	.9220	.2044-02	.1444-02	.2840	2.111	544.2
272	337.50	.93900	1361.0	.4360-01	.5390-01	.6220-01	.9220	.3182-02	.2230-02	.4300	3.188	548.1

IH72, OTS CLEAN, RIGHT SRB HI/HREF

RIGHT SRB

PARAMETRIC DATA

ALPHA = .0000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
267	.0000	-9.000	4.020	73.00	748.0	176.7	.4680	5.295	2618.	.2223-03	.1423-06	4.091
268	-.1000-01	-8.900	4.020	72.90	749.0	177.0	.4680	5.291	2621.	.2216-03	.1425-06	4.076

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
267	.5124-01	.1137-01
268	.5123-01	.1139-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
268	.00000	.80000-02	1310.0	.2446	.3180	.3571	.9318	.1829-01	.1253-01	2.034	15.45	587.0
267	.00000	.25000-01	1311.0	.1868	.2396	.2671	.9318	.1368-01	.9573-02	1.626	11.68	578.0
267	.00000	.76500	1362.0	.2940-01	.3560-01	.4030-01	.9220	.2065-02	.1505-02	.3240	2.458	532.8
267	.00000	.83700	1364.0	.3390-01	.4150-01	.4730-01	.9220	.2425-02	.1739-02	.3580	2.665	541.7
267	.00000	.88400	1365.0	.3860-01	.4710-01	.5380-01	.9220	.2755-02	.1979-02	.4100	3.048	540.7
267	.00000	.90700	1366.0	.3760-01	.4590-01	.5230-01	.9220	.2679-02	.1927-02	.4000	2.978	540.1
267	5.0000	.75000-01	1313.0	.9220-01	.1146	.1252	.9326	.6413-02	.4725-02	.9050	6.460	556.3
267	5.0000	.11000	1314.0	.1320-01	.1590-01	.1710-01	.9326	.8786-03	.6784-03	.1500	1.125	526.6
267	20.000	.75000-01	1316.0	.9540-01	.1195	.1292	.9352	.6622-02	.4885-02	.9030	6.428	563.0
267	20.000	.10000+00	1318.0	.1116	.1418	.1542	.9352	.7900-02	.5717-02	1.002	7.339	572.4
267	20.000	.11000	1319.0	.1183	.1507	.1640	.9352	.8405-02	.6062-02	1.054	7.713	573.9
268	22.500	.72400	1367.0	.3260-01	.3950-01	.4480-01	.9224	.2294-02	.1671-02	.3570	2.711	535.3
267	22.500	.74000	1368.0	.2830-01	.3430-01	.3890-01	.9224	.1992-02	.1450-02	.3090	2.307	534.5
267	22.500	.75000	1369.0	.2950-01	.3580-01	.4050-01	.9224	.2074-02	.1513-02	.3240	2.421	533.4
268	22.500	.76500	1370.0	.2550-01	.3080-01	.3480-01	.9224	.1784-02	.1305-02	.2820	2.145	532.9
268	22.500	.77100	1371.0	.2530-01	.3060-01	.3460-01	.9224	.1771-02	.1295-02	.2800	2.091	533.1
267	22.500	.92500	1372.0	.1880-01	.2280-01	.2590-01	.9224	.1327-02	.9644-03	.2050	1.528	535.3
267	22.500	.93900	1374.0	.2900-01	.3530-01	.4020-01	.9224	.2059-02	.1486-02	.3100	2.307	539.2
267	24.400	.95300	1433.0	.4860-01	.6070-01	.6490-01	.9368	.3327-02	.2489-02	.4670	3.442	560.1
267	35.000	.75000-01	1321.0	.9540-01	.1196	.1275	.9378	.6531-02	.4887-02	.9030	6.428	563.0

IH72, OTS CLEAN, RIGHT SRB HI/HREF (RVZR35)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
267	35.000	.11000	1322.0	.1127	.1437	.1540	.9378	.7892-02	.5775-02	1.001	7.445	574.4
267	35.600	.95300	1434.0	.3820-01	.4760-01	.5040-01	.9388	.2581-02	.1958-02	.3720	2.740	558.1
267	40.000	.95300	1435.0	.3900-01	.4860-01	.5120-01	.9395	.2622-02	.2001-02	.3820	2.817	556.9
267	45.000	.74000	1375.0	.2540-01	.3070-01	.3460-01	.9233	.1773-02	.1302-02	.2810	2.137	531.9
267	45.000	.75000	1376.0	.2590-01	.3130-01	.3520-01	.9233	.1805-02	.1328-02	.2880	2.190	530.8
268	45.000	.76500	1377.0	.2340-01	.2820-01	.3180-01	.9233	.1628-02	.1197-02	.2600	1.944	531.9
268	45.000	.77100	1378.0	.2540-01	.3070-01	.3450-01	.9233	.1767-02	.1301-02	.2840	2.120	531.3
268	45.000	.88400	1381.0	.1040-01	.1250-01	.1410-01	.9233	.7243-03	.5305-03	.1140	.8500	534.5
268	45.000	.90700	1382.0	.1010-01	.1230-01	.1390-01	.9233	.7096-03	.5192-03	.1110	.8300	535.1
267	65.000	.11000	1323.0	.1238	.1621	.1706	.9420	.8741-02	.6344-02	1.004	7.167	589.6
267	67.500	.74000	1383.0	.3440-01	.4160-01	.4670-01	.9242	.2393-02	.1762-02	.3790	2.876	532.9
267	67.500	.75000	1384.0	.3290-01	.3980-01	.4470-01	.9242	.2289-02	.1684-02	.3610	2.739	533.5
268	67.500	.77100	1385.0	.3080-01	.3740-01	.4200-01	.9242	.2152-02	.1580-02	.3370	2.516	535.7
267	76.000	.10000+00	1324.0	.1067	.1400	.1466	.9428	.7509-02	.5466-02	.8590	6.234	590.6
267	76.000	.14100	1386.0	.1107	.1379	.1576	.9245	.8074-02	.5674-02	1.079	7.956	557.7
267	76.000	.14800	1387.0	.8570-01	.1055	.1196	.9245	.6127-02	.4393-02	.8770	6.498	548.2
267	76.000	.15500	1388.0	.7020-01	.8580-01	.9690-01	.9245	.4963-02	.3595-02	.7360	5.471	543.0
267	76.000	.16200	1389.0	.5860-01	.7140-01	.8030-01	.9245	.4116-02	.3001-02	.6250	4.656	539.3
267	76.000	.25000	1390.0	.1020-01	.1230-01	.1380-01	.9245	.7052-03	.5201-03	.1120	.8500	532.6
267	77.500	.95300	1436.0	.6170-01	.7650-01	.7890-01	.9439	.4042-02	.3161-02	.6090	4.497	555.1
267	77.500	.96700	1437.0	.8740-01	.1089	.1123	.9439	.5756-02	.4478-02	.8470	6.246	558.6
267	77.500	.99400	1439.0	.5700-01	.7160-01	.7390-01	.9439	.3788-02	.2921-02	.5360	3.937	564.4
268	90.000	.15000-01	1325.0	.2644	.3431	.3577	.9432	.1833-01	.1354-01	2.210	16.34	586.1
267	90.000	.25000-01	1326.0	.2499	.3298	.3447	.9432	.1766-01	.1280-01	1.977	14.09	593.4
268	90.000	.40000-01	1327.0	.1789	.2305	.2400	.9432	.1229-01	.9166-02	1.534	11.18	581.9
267	90.000	.60000-01	1328.0	.1350	.1692	.1752	.9432	.8977-02	.6916-02	1.279	8.820	562.9
267	90.000	.75000-01	1329.0	.7560-01	.9280-01	.9580-01	.9432	.4907-02	.3874-02	.7810	5.349	546.1
268	90.000	.13230	1479.0	.2175	.2938	.3577	.9246	.1833-01	.1114-01	1.606	11.57	605.2
268	90.000	.13390	1480.0	.1900	.2464	.2901	.9246	.1486-01	.9736-02	1.595	11.60	585.5
268	90.000	.13560	1481.0	.1631	.2061	.2379	.9246	.1219-01	.8354-02	1.500	11.00	569.7
268	90.000	.13730	1482.0	.1339	.1682	.1933	.9246	.9901-02	.6861-02	1.263	9.278	565.2
268	90.000	.13890	1483.0	.1170	.1450	.1651	.9246	.8460-02	.5994-02	1.162	8.578	555.4
268	90.000	.55000	1391.0	.5300-01	.6430-01	.7220-01	.9246	.3698-02	.2713-02	.5750	4.287	537.2
268	90.000	.65000	1392.0	.4290-01	.5190-01	.5820-01	.9246	.2981-02	.2196-02	.4710	3.513	534.8
267	90.000	.74000	1393.0	.6700-02	.8100-02	.9100-02	.9246	.4667-03	.3444-03	.7400-01	.5620	532.8
267	90.000	.76500	1394.0	.2570-01	.3130-01	.3510-01	.9246	.1799-02	.1318-02	.2780	2.076	536.6
267	90.000	.77100	1395.0	.1790-01	.2190-01	.2460-01	.9246	.1260-02	.9188-03	.1910	1.424	539.6
267	90.000	.81500	1396.0	.6500-02	.7900-02	.8900-02	.9246	.4541-03	.3316-03	.6900-01	.5250	538.8
267	90.000	.83700	1397.0	.1040-01	.1260-01	.1420-01	.9246	.7261-03	.5325-03	.1130	.8400	536.3
267	90.000	.88400	1398.0	.1450-01	.1750-01	.1960-01	.9246	.1002-02	.7434-03	.1620	1.213	529.6
267	90.000	.89400	1399.0	.2860-01	.3420-01	.3810-01	.9246	.1950-02	.1465-02	.3320	2.497	521.0
267	90.000	.90700	1400.0	.1670-01	.2030-01	.2270-01	.9246	.1163-02	.8568-03	.1840	1.371	533.5
267	90.000	.91700	1401.0	.1890-01	.2290-01	.2570-01	.9246	.1317-02	.9667-03	.2050	1.529	535.7

IH72, OTS CLEAN, RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
267	90.000	.93200	1402.0	.2590-01	.3160-01	.3550-01	.9246	.1820-02	.1327-02	.2760	2.056	539.6
267	90.000	.93900	1403.0	.3340-01	.4080-01	.4600-01	.9246	.2358-02	.1711-02	.3520	2.614	542.3
268	95.000	.13560	1484.0	.1526	.1928	.2226	.9246	.1140-01	.7819-02	1.406	10.31	569.4
268	95.000	.13730	1485.0	.1367	.1704	.1949	.9246	.9984-02	.7003-02	1.326	9.768	559.9
268	95.000	.13890	1486.0	.1072	.1329	.1514	.9246	.7757-02	.5493-02	1.064	7.856	555.6
268	95.000	.14560	1487.0	.8920-01	.1095	.1238	.9246	.6342-02	.4569-02	.9240	6.852	547.0
268	95.000	.14730	1488.0	.8230-01	.1005	.1133	.9246	.5804-02	.4214-02	.8690	6.460	543.0
267	104.00	.10000+00	1330.0	.8150-01	.1076	.1128	.9428	.5780-02	.4175-02	.6430	4.658	593.8
267	104.00	.12000	1404.0	.1862	.2421	.2859	.9244	.1465-01	.9541-02	1.546	11.24	585.8
267	104.00	.12700	1405.0	.1840	.2485	.3028	.9244	.1551-01	.9429-02	1.358	9.792	603.7
267	104.00	.13400	1406.0	.1465	.1842	.2120	.9244	.1086-01	.7508-02	1.374	10.10	564.7
267	104.00	.14100	1407.0	.1202	.1490	.1698	.9244	.8701-02	.6161-02	1.192	8.810	554.2
267	104.00	.14800	1408.0	.8650-01	.1059	.1197	.9244	.6132-02	.4430-02	.9020	6.696	544.2
267	104.00	.15500	1409.0	.7320-01	.8920-01	.1005	.9244	.5148-02	.3751-02	.7810	5.813	539.6
267	104.00	.16200	1410.0	.6430-01	.7820-01	.8790-01	.9244	.4503-02	.3296-02	.6950	5.179	537.0
267	104.00	.18000	1412.0	.4140-01	.5020-01	.5630-01	.9244	.2885-02	.2121-02	.4530	3.379	534.3
267	104.00	.18600	1413.0	.3770-01	.4570-01	.5120-01	.9244	.2623-02	.1931-02	.4140	3.090	533.5
267	104.00	.19300	1414.0	.3440-01	.4160-01	.4670-01	.9244	.2390-02	.1763-02	.3800	2.835	532.5
267	104.00	.20000	1415.0	.3020-01	.3650-01	.4090-01	.9244	.2094-02	.1545-02	.3330	2.488	532.3
267	104.00	.25000	1416.0	.1800-01	.2170-01	.2420-01	.9244	.1238-02	.9229-03	.2050	1.563	525.7
268	112.00	.13560	1489.0	.8670-01	.1069	.1215	.9242	.6225-02	.4439-02	.8790	6.501	551.3
268	112.00	.13730	1490.0	.8840-01	.1091	.1241	.9242	.6356-02	.4530-02	.8960	6.627	551.6
268	112.00	.13890	1491.0	.8060-01	.9920-01	.1126	.9242	.5767-02	.4128-02	.8250	6.106	549.5
268	112.00	.14560	1492.0	.2400-01	.2910-01	.3270-01	.9242	.1673-02	.1229-02	.2630	1.959	535.5
267	112.50	.74000	1417.0	.2680-01	.3260-01	.3660-01	.9242	.1875-02	.1373-02	.2910	2.168	536.1
267	112.50	.75000	1418.0	.2440-01	.2960-01	.3330-01	.9242	.1708-02	.1250-02	.2650	1.972	536.2
268	112.50	.77100	1419.0	.2260-01	.2750-01	.3100-01	.9242	.1590-02	.1159-02	.2430	1.838	539.7
267	112.50	.92500	1420.0	.1530-01	.1850-01	.2080-01	.9242	.1067-02	.7819-03	.1660	1.236	535.8
267	112.50	.93200	1421.0	.2040-01	.2480-01	.2800-01	.9242	.1432-02	.1044-02	.2180	1.624	538.9
267	112.50	.93900	1422.0	.2730-01	.3330-01	.3760-01	.9242	.1929-02	.1399-02	.2890	2.147	541.4
267	112.50	.95300	1440.0	.4510-01	.5560-01	.5740-01	.9431	.2943-02	.2309-02	.4560	3.375	550.4
268	112.50	.96700	1441.0	.6110-01	.7550-01	.7800-01	.9431	.3996-02	.3129-02	.6150	4.550	552.6
268	112.50	.99400	1443.0	.5200-01	.6440-01	.6660-01	.9431	.3411-02	.2663-02	.5180	3.824	554.8
267	135.00	.25000-01	1332.0	.2199	.2878	.3079	.9394	.1578-01	.1127-01	1.786	12.97	589.3
268	135.00	.50000-01	1333.0	.1627	.2074	.2203	.9394	.1129-01	.8333-02	1.447	10.58	575.6
267	135.00	.75000-01	1334.0	.9190-01	.1145	.1207	.9394	.6186-02	.4707-02	.8920	6.685	558.4
267	135.00	.10000+00	1335.0	.9990-01	.1260	.1334	.9394	.6833-02	.5120-02	.9250	6.793	567.1
267	135.00	.40000	1423.0	.6180-01	.7610-01	.8690-01	.9233	.4450-02	.3168-02	.6310	4.751	548.7
268	135.00	.92500	1424.0	.1930-01	.2370-01	.2690-01	.9233	.1378-02	.9895-03	.2020	1.496	545.6
268	140.00	.13560	1494.0	.4260-01	.5200-01	.5910-01	.9231	.3028-02	.2181-02	.4490	3.337	543.3
268	140.00	.13730	1495.0	.4250-01	.5200-01	.5900-01	.9231	.3025-02	.2179-02	.4490	3.335	543.2
268	140.00	.13890	1496.0	.4120-01	.5030-01	.5710-01	.9231	.2927-02	.2113-02	.4380	3.254	542.1
268	140.00	.14560	1497.0	.3970-01	.4840-01	.5480-01	.9231	.2809-02	.2036-02	.4270	3.175	539.8

IH72, OTS CLEAN, RIGHT SRB HI/HREF (RVZR35)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
268	150.00	.14230	1499.0	.3670-01	.4480-01	.5100-01	.9227	.2610-02	.1878-02	.3880	2.886	542.6
268	180.00	.80000-02	1298.0	.2801	.3757	.4292	.9317	.2199-01	.1435-01	2.114	16.05	602.0
268	180.00	.15000-01	1299.0	.2046	.2578	.2848	.9317	.1459-01	.1048-01	1.904	13.74	567.7
267	180.00	.25000-01	1300.0	.2003	.2565	.2858	.9317	.1464-01	.1026-01	1.751	12.18	577.2
268	180.00	.50000-01	1301.0	.1478	.1847	.2033	.9317	.1042-01	.7571-02	1.418	9.937	562.0
267	180.00	.75000-01	1302.0	.9690-01	.1204	.1320	.9317	.6763-02	.4967-02	.9550	6.608	555.6
268	180.00	.10000+00	1303.0	.1230	.1561	.1730	.9317	.8864-02	.6301-02	1.115	8.162	572.4
267	225.00	.98000	1425.0	.8520-01	.1071	.1216	.9268	.6230-02	.4366-02	.7990	5.872	564.8
267	263.00	.13600	1336.0	.2370-01	.2860-01	.3240-01	.9220	.1659-02	.1216-02	.2660	1.987	529.4
268	263.00	.20000	1472.0	.1380-01	.1660-01	.1870-01	.9220	.9590-03	.7049-03	.1550	1.164	528.7
268	263.00	.30000	1337.0	.2570-01	.3120-01	.3540-01	.9220	.1816-02	.1316-02	.2790	2.118	537.0
268	263.00	.40000	1473.0	.3040-01	.3720-01	.4250-01	.9220	.2178-02	.1557-02	.3190	2.369	544.3
268	263.00	.50000	1474.0	.3850-01	.4720-01	.5400-01	.9220	.2769-02	.1972-02	.4010	2.971	546.2
268	263.00	.60000	1475.0	.5320-01	.6510-01	.7430-01	.9220	.3808-02	.2726-02	.5600	4.162	543.7
268	263.00	.75000	1338.0	.5370-01	.6570-01	.7510-01	.9220	.3847-02	.2751-02	.5650	4.193	544.1
268	263.00	.81500	1339.0	.4810-01	.5880-01	.6720-01	.9220	.3445-02	.2463-02	.5050	3.751	544.2
268	263.00	.83700	1340.0	.4520-01	.5530-01	.6310-01	.9220	.3234-02	.2315-02	.4760	3.537	543.6
268	263.00	.88400	1341.0	.4630-01	.5650-01	.6450-01	.9220	.3302-02	.2370-02	.4900	3.644	542.4
268	263.00	.89400	1342.0	.4780-01	.5840-01	.6670-01	.9220	.3416-02	.2446-02	.5040	3.741	543.4
268	263.00	.92800	1477.0	.6050-01	.7430-01	.8520-01	.9220	.4363-02	.3099-02	.6250	4.635	547.5
267	263.00	.93900	1344.0	.8350-01	.1032	.1188	.9220	.6088-02	.4277-02	.8390	6.206	551.7
268	270.00	.80000-02	1304.0	.1739	.2168	.2478	.9247	.1269-01	.8910-02	1.687	13.32	559.9
268	270.00	.50000-01	1306.0	.8520-01	.1042	.1175	.9247	.6019-02	.4365-02	.8960	6.341	543.9
267	270.00	.75000-01	1307.0	.6690-01	.8180-01	.9220-01	.9246	.4723-02	.3426-02	.7030	4.974	542.6
268	270.00	.10000+00	1308.0	.8010-01	.9890-01	.1122	.9247	.5748-02	.4104-02	.8100	5.994	551.9
267	270.00	.11500	1345.0	.6220-01	.7690-01	.8860-01	.9220	.4539-02	.3188-02	.6250	4.624	551.7
267	277.00	.13600	1346.0	.2170-01	.2620-01	.2960-01	.9220	.1517-02	.1110-02	.2410	1.805	530.3
267	277.00	.30000	1347.0	.2540-01	.3090-01	.3510-01	.9220	.1800-02	.1302-02	.2750	2.084	536.7
268	277.00	.40000	1464.0	.2850-01	.3480-01	.3970-01	.9220	.2036-02	.1460-02	.3020	2.241	542.7
268	277.00	.60000	1466.0	.3950-01	.4800-01	.5450-01	.9220	.2793-02	.2025-02	.4310	3.211	536.6
268	277.00	.70000	1467.0	.2880-01	.3490-01	.3970-01	.9220	.2033-02	.1473-02	.3120	2.328	537.2
267	277.00	.75000	1348.0	.3000-01	.3650-01	.4140-01	.9220	.2123-02	.1539-02	.3270	2.436	535.6
267	277.00	.81500	1349.0	.3180-01	.3870-01	.4400-01	.9220	.2256-02	.1628-02	.3410	2.540	538.3
267	277.00	.83700	1350.0	.3420-01	.4170-01	.4760-01	.9220	.2438-02	.1755-02	.3650	2.718	539.7
267	277.00	.88400	1351.0	.3710-01	.4530-01	.5160-01	.9220	.2644-02	.1901-02	.3940	2.933	540.4
267	277.00	.89400	1352.0	.4440-01	.5440-01	.6220-01	.9220	.3184-02	.2276-02	.4650	3.458	543.3
268	277.00	.90000	1468.0	.4850-01	.5940-01	.6800-01	.9220	.3482-02	.2482-02	.5050	3.751	545.7
268	277.00	.90700	1353.0	.5130-01	.6290-01	.7200-01	.9220	.3688-02	.2631-02	.5360	3.979	545.4
268	277.00	.92100	1469.0	.5650-01	.6930-01	.7930-01	.9220	.4063-02	.2895-02	.5880	4.366	546.0
268	277.00	.92800	1470.0	.5890-01	.7230-01	.8280-01	.9220	.4239-02	.3019-02	.6130	4.545	546.3
268	277.00	.93700	1471.0	.6210-01	.7630-01	.8740-01	.9220	.4479-02	.3182-02	.6430	4.763	547.4
267	277.00	.93900	1354.0	.8100-01	.1001	.1153	.9220	.5908-02	.4149-02	.8130	6.012	551.9
268	335.00	.11000	1309.0	.1166	.1464	.1648	.9282	.8444-02	.5972-02	1.097	8.056	565.6

IH72, OTS CLEAN, RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
267	337.50	.74000	1355.0	.2540-01	.3080-01	.3490-01	.9220	.1789-02	.1302-02	.2790	2.085	533.3
267	337.50	.75000	1356.0	.2550-01	.3080-01	.3500-01	.9220	.1791-02	.1305-02	.2810	2.133	532.7
268	337.50	.76500	1357.0	.2670-01	.3240-01	.3670-01	.9220	.1881-02	.1370-02	.2940	2.234	534.3
268	337.50	.92500	1359.0	.3380-01	.4130-01	.4710-01	.9220	.2415-02	.1731-02	.3570	2.655	542.8
268	337.50	.93200	1360.0	.3470-01	.4240-01	.4850-01	.9220	.2484-02	.1777-02	.3650	2.707	544.1
268	337.50	.93900	1361.0	.4650-01	.5710-01	.6550-01	.9220	.3355-02	.2384-02	.4810	3.567	547.5

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
265	-.8000-01	.0000	4.020	73.00	743.0	175.5	.4680	5.298	2609.	.2239-03	.1413-06	4.136
266	-.1200	.0000	4.020	73.00	746.0	176.3	.4680	5.293	2616.	.2227-03	.1420-06	4.102

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
265	.5120-01	.1132-01
266	.5121-01	.1136-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
266	.00000	.80000-02	1310.0	.3431	.4301	.4730	.9321	.2422-01	.1757-01	3.241	24.94	561.7
265	.00000	.25000-01	1311.0	.3098	.3947	.4377	.9321	.2241-01	.1586-01	2.737	19.73	570.0
265	.00000	.76500	1362.0	.6360-01	.7840-01	.9020-01	.9220	.4619-02	.3255-02	.6380	4.813	546.5
265	.00000	.83700	1364.0	.6570-01	.8110-01	.9340-01	.9220	.4780-02	.3362-02	.6570	4.868	547.3
265	.00000	.88400	1365.0	.5760-01	.7110-01	.8170-01	.9220	.4184-02	.2951-02	.5800	4.304	546.0
265	.00000	.90700	1366.0	.5000-01	.6180-01	.7120-01	.9220	.3646-02	.2560-02	.4980	3.689	548.1
265	5.0000	.75000-01	1313.0	.1469	.1801	.1960	.9321	.1004-01	.7519-02	1.512	10.88	541.4
265	5.0000	.11000	1314.0	.3420-01	.4140-01	.4480-01	.9321	.2294-02	.1751-02	.3730	2.794	529.4
265	20.000	.75000-01	1316.0	.1566	.1931	.2107	.9321	.1079-01	.8018-02	1.575	11.31	546.1
265	20.000	.10000+00	1318.0	.1739	.2154	.2355	.9321	.1206-01	.8905-02	1.718	12.72	549.6
265	20.000	.11000	1319.0	.1720	.2132	.2333	.9321	.1195-01	.8805-02	1.689	12.50	550.7
266	22.500	.72400	1367.0	.8700-01	.1070	.1228	.9220	.6287-02	.4456-02	.8910	6.718	546.3
265	22.500	.74000	1368.0	.8830-01	.1095	.1265	.9220	.6474-02	.4521-02	.8680	6.424	550.6
265	22.500	.75000	1369.0	.8170-01	.1012	.1167	.9220	.5975-02	.4184-02	.8080	5.987	549.3
266	22.500	.76500	1370.0	.7510-01	.9210-01	.1054	.9220	.5399-02	.3847-02	.7780	5.880	543.8
266	22.500	.77100	1371.0	.7610-01	.9340-01	.1069	.9220	.5477-02	.3897-02	.7860	5.836	544.5
265	22.500	.92500	1372.0	.3570-01	.4390-01	.5050-01	.9220	.2585-02	.1826-02	.3600	2.671	545.4
265	22.500	.93900	1374.0	.4520-01	.5610-01	.6490-01	.9220	.3320-02	.2315-02	.4430	3.276	551.3
265	24.400	.95300	1433.0	.1161	.1492	.1654	.9328	.8469-02	.5942-02	.9940	7.266	575.3
265	35.000	.75000-01	1321.0	.1608	.1978	.2157	.9321	.1104-01	.8234-02	1.634	11.74	544.1

IH72, OTS CLEAN, RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
265	35.000	.11000	1322.0	.1455	.1797	.1962	.9321	.1005-01	.7447-02	1.452	10.95	547.6
265	35.600	.95300	1434.0	.1004	.1281	.1416	.9328	.7250-02	.5138-02	.8810	6.452	571.2
265	40.000	.95300	1435.0	.9000-01	.1146	.1266	.9328	.6480-02	.4606-02	.7950	5.827	570.0
265	45.000	.74000	1375.0	.8960-01	.1111	.1282	.9220	.6566-02	.4589-02	.8830	6.645	550.2
265	45.000	.75000	1376.0	.8450-01	.1046	.1207	.9220	.6180-02	.4328-02	.8370	6.301	549.3
266	45.000	.76500	1377.0	.7560-01	.9270-01	.1060	.9220	.5430-02	.3873-02	.7860	5.837	543.3
266	45.000	.77100	1378.0	.7250-01	.8880-01	.1016	.9220	.5201-02	.3713-02	.7550	5.613	542.8
266	45.000	.88400	1381.0	.3530-01	.4270-01	.4850-01	.9220	.2481-02	.1805-02	.3860	2.879	532.6
266	45.000	.90700	1382.0	.2860-01	.3470-01	.3940-01	.9220	.2017-02	.1464-02	.3110	2.320	533.9
265	65.000	.11000	1323.0	.2011	.2534	.2795	.9320	.1431-01	.1030-01	1.852	13.40	562.7
265	67.500	.74000	1383.0	.8810-01	.1086	.1249	.9220	.6394-02	.4509-02	.8860	6.685	546.1
265	67.500	.75000	1384.0	.8280-01	.1021	.1175	.9220	.6017-02	.4239-02	.8310	6.267	546.6
266	67.500	.77100	1385.0	.7730-01	.9440-01	.1077	.9220	.5516-02	.3960-02	.8170	6.078	539.9
265	76.000	.10000+00	1324.0	.1522	.1893	.2075	.9320	.1062-01	.7793-02	1.476	10.91	553.1
265	76.000	.14100	1386.0	.1506	.1904	.2234	.9220	.1144-01	.7713-02	1.372	10.09	564.6
265	76.000	.14800	1387.0	.1183	.1468	.1696	.9220	.8683-02	.6058-02	1.161	8.589	551.0
265	76.000	.15500	1388.0	.1084	.1342	.1548	.9220	.7925-02	.5548-02	1.071	7.931	549.5
265	76.000	.16200	1389.0	.9990-01	.1236	.1426	.9220	.7299-02	.5116-02	.9910	7.342	548.9
265	76.000	.25000	1390.0	.2290-01	.2760-01	.3110-01	.9220	.1593-02	.1173-02	.2570	1.965	523.0
265	77.500	.95300	1436.0	.2710-01	.3390-01	.3710-01	.9327	.1900-02	.1386-02	.2560	1.888	557.9
265	77.500	.96700	1437.0	.4420-01	.5530-01	.6060-01	.9327	.3101-02	.2261-02	.4170	3.077	558.1
265	77.500	.99400	1439.0	.4700-01	.5960-01	.6570-01	.9327	.3363-02	.2405-02	.4220	3.098	567.1
266	90.000	.15000-01	1325.0	.3020	.3813	.4211	.9320	.2156-01	.1547-01	2.777	20.73	566.7
265	90.000	.25000-01	1326.0	.3441	.4521	.5098	.9320	.2610-01	.1762-01	2.737	19.57	587.2
266	90.000	.40000-01	1327.0	.2684	.3376	.3723	.9320	.1906-01	.1374-01	2.500	18.37	564.3
265	90.000	.60000-01	1328.0	.1932	.2403	.2634	.9320	.1348-01	.9894-02	1.877	13.01	552.9
265	90.000	.75000-01	1329.0	.9970-01	.1224	.1333	.9320	.6827-02	.5105-02	1.022	7.010	542.4
266	90.000	.13230	1479.0	.2400	.3197	.3927	.9220	.2011-01	.1229-01	1.840	13.31	596.5
266	90.000	.13390	1480.0	.2275	.3046	.3760	.9220	.1926-01	.1165-01	1.716	12.40	598.9
266	90.000	.13560	1481.0	.2027	.2643	.3185	.9220	.1631-01	.1038-01	1.662	12.09	586.1
266	90.000	.13730	1482.0	.1750	.2240	.2657	.9220	.1361-01	.8963-02	1.529	11.17	575.6
266	90.000	.13890	1483.0	.1461	.1830	.2133	.9220	.1092-01	.7481-02	1.382	10.18	561.4
266	90.000	.55000	1391.0	.4960-01	.6060-01	.6910-01	.9220	.3540-02	.2543-02	.5250	3.908	539.7
266	90.000	.65000	1392.0	.5580-01	.6850-01	.7860-01	.9220	.4023-02	.2857-02	.5740	4.258	545.4
265	90.000	.74000	1393.0	.9200-02	.1120-01	.1280-01	.9220	.6556-03	.4697-03	.9600-01	.7270	538.3
265	90.000	.76500	1394.0	.4440-01	.5500-01	.6340-01	.9220	.3244-02	.2275-02	.4410	3.271	548.6
265	90.000	.77100	1395.0	.4870-01	.6000-01	.6900-01	.9220	.3532-02	.2494-02	.4910	3.646	545.5
265	90.000	.81500	1396.0	.1480-01	.1800-01	.2050-01	.9220	.1047-02	.7567-03	.1580	1.200	533.7
265	90.000	.83700	1397.0	.8500-02	.1030-01	.1170-01	.9220	.6009-03	.4339-03	.9000-01	.6750	534.1
265	90.000	.88400	1398.0	.7500-02	.9100-02	.1040-01	.9220	.5314-03	.3846-03	.8100-01	.6020	532.9
265	90.000	.89400	1399.0	.3020-01	.3640-01	.4110-01	.9220	.2105-02	.1548-02	.3380	2.539	523.9
265	90.000	.90700	1400.0	.8400-02	.1020-01	.1160-01	.9220	.5946-03	.4280-03	.8800-01	.6600	535.9
265	90.000	.91700	1401.0	.9700-02	.1180-01	.1350-01	.9220	.6910-03	.4960-03	.1020	.7580	537.4

IH72, OTS CLEAN, RIGHT SRB HI/HREF (RVZR36)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
265	90.000	.93200	1402.0	.1340-01	.1640-01	.1870-01	.9220	.9593-03	.6852-03	.1390	1.034	539.9
265	90.000	.93900	1403.0	.1820-01	.2240-01	.2560-01	.9220	.1312-02	.9317-03	.1860	1.383	542.8
266	95.000	.13560	1484.0	.1812	.2373	.2871	.9220	.1470-01	.9281-02	1.465	10.64	588.3
266	95.000	.13730	1485.0	.1705	.2189	.2603	.9220	.1333-01	.8730-02	1.472	10.75	577.5
266	95.000	.13890	1486.0	.1426	.1800	.2109	.9220	.1080-01	.7303-02	1.312	9.632	566.6
266	95.000	.14560	1487.0	.1102	.1371	.1587	.9220	.8127-02	.5646-02	1.076	7.945	555.6
266	95.000	.14730	1488.0	.1089	.1349	.1557	.9220	.7973-02	.5575-02	1.079	7.978	552.7
265	104.00	.10000+00	1330.0	.1657	.2073	.2280	.9320	.1167-01	.8482-02	1.569	11.57	557.6
265	104.00	.12000	1404.0	.1999	.2629	.3192	.9220	.1634-01	.1023-01	1.585	11.52	587.7
265	104.00	.12700	1405.0	.1907	.2479	.2979	.9220	.1525-01	.9762-02	1.570	11.45	581.7
265	104.00	.13400	1406.0	.1785	.2341	.2835	.9220	.1452-01	.9139-02	1.429	10.39	586.2
265	104.00	.14100	1407.0	.1515	.1937	.2294	.9220	.1175-01	.7758-02	1.323	9.690	572.0
265	104.00	.14800	1408.0	.1089	.1358	.1577	.9220	.8073-02	.5573-02	1.042	7.697	555.5
265	104.00	.15500	1409.0	.1078	.1343	.1558	.9220	.7974-02	.5518-02	1.037	7.663	554.6
265	104.00	.16200	1410.0	.1038	.1295	.1503	.9220	.7694-02	.5315-02	.9950	7.350	555.3
265	104.00	.18000	1412.0	.6530-01	.8040-01	.9230-01	.9220	.4727-02	.3341-02	.6600	4.897	545.1
265	104.00	.18600	1413.0	.5830-01	.7160-01	.8210-01	.9220	.4201-02	.2985-02	.5970	4.438	542.5
265	104.00	.19300	1414.0	.5820-01	.7130-01	.8170-01	.9220	.4183-02	.2978-02	.5980	4.448	541.6
265	104.00	.20000	1415.0	.5410-01	.6630-01	.7590-01	.9220	.3886-02	.2768-02	.5580	4.146	541.2
265	104.00	.25000	1416.0	.2630-01	.3190-01	.3620-01	.9220	.1854-02	.1345-02	.2840	2.158	531.5
266	112.00	.13560	1489.0	.1058	.1308	.1509	.9220	.7725-02	.5416-02	1.054	7.600	551.5
266	112.00	.13730	1490.0	.1110	.1384	.1607	.9220	.8227-02	.5686-02	1.072	7.905	557.7
266	112.00	.13890	1491.0	.1122	.1402	.1631	.9220	.8351-02	.5746-02	1.072	7.900	559.6
266	112.00	.14560	1492.0	.3160-01	.3860-01	.4400-01	.9220	.2252-02	.1620-02	.3360	2.500	538.9
265	112.50	.74000	1417.0	.3410-01	.4260-01	.4950-01	.9220	.2534-02	.1748-02	.3260	2.410	555.8
265	112.50	.75000	1418.0	.3300-01	.4110-01	.4770-01	.9220	.2444-02	.1689-02	.3170	2.338	555.1
266	112.50	.77100	1419.0	.3190-01	.3960-01	.4570-01	.9220	.2340-02	.1634-02	.3160	2.373	553.1
265	112.50	.92500	1420.0	.2800-02	.3400-02	.3900-02	.9220	.2008-03	.1444-03	.3000-01	.2220	536.3
265	112.50	.93200	1421.0	.6700-02	.8100-02	.9300-02	.9220	.4765-03	.3410-03	.6900-01	.5170	539.0
265	112.50	.93900	1422.0	.1360-01	.1670-01	.1910-01	.9220	.9792-03	.6967-03	.1400	1.040	541.8
265	112.50	.95300	1440.0	.9600-02	.1190-01	.1310-01	.9327	.6686-03	.4904-03	.9200-01	.6790	555.0
266	112.50	.96700	1441.0	.3100-01	.3840-01	.4180-01	.9327	.2140-02	.1589-02	.3100	2.295	551.0
266	112.50	.99400	1443.0	.4350-01	.5460-01	.5980-01	.9327	.3063-02	.2229-02	.4120	3.031	561.5
265	135.00	.25000-01	1332.0	.2956	.3893	.4397	.9319	.2251-01	.1513-01	2.333	16.95	588.4
266	135.00	.50000-01	1333.0	.2185	.2767	.3063	.9319	.1568-01	.1119-01	1.984	14.55	568.9
265	135.00	.75000-01	1334.0	.1196	.1486	.1628	.9319	.8336-02	.6122-02	1.165	8.761	552.3
265	135.00	.10000+00	1335.0	.1156	.1440	.1580	.9319	.8090-02	.5921-02	1.116	8.248	554.0
265	135.00	.40000	1423.0	.3650-01	.4490-01	.5160-01	.9220	.2643-02	.1870-02	.3700	2.795	544.5
266	135.00	.92500	1424.0	.1520-01	.1860-01	.2120-01	.9220	.1086-02	.7807-03	.1620	1.204	539.1
266	140.00	.13560	1494.0	.4070-01	.4930-01	.5580-01	.9220	.2859-02	.2086-02	.4490	3.356	531.0
266	140.00	.13730	1495.0	.4030-01	.4880-01	.5530-01	.9220	.2832-02	.2062-02	.4420	3.299	532.0
266	140.00	.13890	1496.0	.4960-01	.6030-01	.6860-01	.9220	.3512-02	.2539-02	.5330	3.974	536.2
266	140.00	.14560	1497.0	.5340-01	.6500-01	.7410-01	.9220	.3793-02	.2734-02	.5700	4.248	537.7

IH72, OTS CLEAN, RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
266	150.00	.14230	1499.0	.4210-01	.5110-01	.5800-01	.9220	.2972-02	.2158-02	.4590	3.426	533.6
266	180.00	.80000-02	1298.0	.3502	.4612	.5212	.9319	.2669-01	.1793-01	2.779	21.22	591.2
266	180.00	.15000-01	1299.0	.2133	.2694	.2978	.9319	.1525-01	.1092-01	1.958	14.13	567.0
265	180.00	.25000-01	1300.0	.2681	.3485	.3908	.9319	.2001-01	.1373-01	2.211	15.35	581.5
266	180.00	.50000-01	1301.0	.2155	.2716	.2999	.9319	.1536-01	.1103-01	1.992	13.93	565.7
265	180.00	.75000-01	1302.0	.1310	.1626	.1782	.9319	.9122-02	.6706-02	1.281	8.883	551.6
266	180.00	.10000+00	1303.0	.1608	.2034	.2250	.9319	.1152-01	.8234-02	1.468	10.77	568.0
265	225.00	.98000	1425.0	.7160-01	.9620-01	.1091	.9326	.5587-02	.3667-02	.5340	3.859	597.1
265	263.00	.13600	1336.0	.3760-01	.4560-01	.5170-01	.9220	.2647-02	.1926-02	.4090	3.062	530.0
266	263.00	.20000	1472.0	.3450-01	.4170-01	.4730-01	.9220	.2420-02	.1765-02	.3790	2.835	531.3
266	263.00	.30000	1337.0	.5760-01	.7010-01	.7990-01	.9220	.4089-02	.2952-02	.6180	4.682	536.9
266	263.00	.40000	1473.0	.5260-01	.6410-01	.7310-01	.9220	.3742-02	.2693-02	.5590	4.161	538.7
266	263.00	.50000	1474.0	.5130-01	.6240-01	.7100-01	.9220	.3637-02	.2625-02	.5490	4.089	537.1
266	263.00	.60000	1475.0	.6200-01	.7510-01	.8520-01	.9220	.4364-02	.3175-02	.6780	5.068	532.5
266	263.00	.75000	1338.0	.4620-01	.5640-01	.6430-01	.9220	.3292-02	.2367-02	.4910	3.653	539.0
266	263.00	.81500	1339.0	.4890-01	.5960-01	.6800-01	.9220	.3480-02	.2502-02	.5180	3.856	539.1
266	263.00	.83700	1340.0	.4680-01	.5700-01	.6500-01	.9220	.3326-02	.2395-02	.4980	3.706	538.4
266	263.00	.88400	1341.0	.4590-01	.5580-01	.6360-01	.9220	.3255-02	.2350-02	.4920	3.666	536.9
266	263.00	.89400	1342.0	.4380-01	.5330-01	.6060-01	.9220	.3104-02	.2242-02	.4700	3.500	536.7
266	263.00	.92800	1477.0	.4860-01	.5940-01	.6780-01	.9220	.3470-02	.2488-02	.5120	3.806	540.6
265	263.00	.93900	1344.0	.6570-01	.8150-01	.9430-01	.9220	.4828-02	.3363-02	.6420	4.746	551.8
266	270.00	.80000-02	1304.0	.2298	.2837	.3099	.9320	.1587-01	.1177-01	2.313	18.35	549.7
266	270.00	.50000-01	1306.0	.2114	.2620	.2867	.9320	.1468-01	.1083-01	2.094	14.74	552.8
265	270.00	.75000-01	1307.0	.1332	.1637	.1784	.9320	.9135-02	.6822-02	1.360	9.625	543.2
266	270.00	.10000+00	1308.0	.1538	.1914	.2098	.9320	.1074-01	.7878-02	1.499	11.07	555.9
265	270.00	.11500	1345.0	.1119	.1404	.1638	.9220	.8388-02	.5728-02	1.046	7.706	559.9
265	277.00	.13600	1346.0	.3650-01	.4430-01	.5020-01	.9220	.2570-02	.1871-02	.3980	2.980	529.6
265	277.00	.30000	1347.0	.5610-01	.6860-01	.7840-01	.9220	.4013-02	.2872-02	.5850	4.429	538.9
266	277.00	.40000	1464.0	.5030-01	.6120-01	.6960-01	.9220	.3563-02	.2575-02	.5400	4.028	536.4
266	277.00	.60000	1466.0	.6430-01	.7790-01	.8840-01	.9220	.4527-02	.3294-02	.7040	5.258	532.5
266	277.00	.70000	1467.0	.4960-01	.6040-01	.6870-01	.9220	.3520-02	.2540-02	.5310	3.960	537.0
265	277.00	.75000	1348.0	.5400-01	.6600-01	.7540-01	.9220	.3862-02	.2763-02	.5620	4.187	539.0
265	277.00	.81500	1349.0	.5300-01	.6490-01	.7430-01	.9220	.3802-02	.2711-02	.5470	4.073	540.6
265	277.00	.83700	1350.0	.5300-01	.6500-01	.7440-01	.9220	.3808-02	.2713-02	.5460	4.063	541.2
265	277.00	.88400	1351.0	.3800-01	.4660-01	.5340-01	.9220	.2734-02	.1948-02	.3920	2.918	541.1
265	277.00	.89400	1352.0	.4020-01	.4930-01	.5650-01	.9220	.2892-02	.2057-02	.4130	3.071	541.8
266	277.00	.90000	1468.0	.4360-01	.5320-01	.6060-01	.9220	.3105-02	.2234-02	.4630	3.450	538.8
266	277.00	.90700	1353.0	.4500-01	.5490-01	.6250-01	.9220	.3203-02	.2304-02	.4780	3.560	538.7
266	277.00	.92100	1469.0	.4830-01	.5890-01	.6710-01	.9220	.3437-02	.2471-02	.5120	3.810	539.1
266	277.00	.92800	1470.0	.5060-01	.6180-01	.7050-01	.9220	.3609-02	.2591-02	.5350	3.978	539.9
266	277.00	.93700	1471.0	.5360-01	.6550-01	.7490-01	.9220	.3834-02	.2745-02	.5630	4.185	541.2
265	277.00	.93900	1354.0	.5900-01	.7330-01	.8470-01	.9220	.4337-02	.3022-02	.5770	4.269	551.6
266	335.00	.11000	1309.0	.1887	.2337	.2556	.9321	.1309-01	.9665-02	1.872	13.84	552.5

IH72, OTS CLEAN, RIGHT SRB HI/HREF (RVZR36)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
265	337.50	.74000	1355.0	.6510-01	.8020-01	.9210-01	.9220	.4715-02	.3335-02	.6600	4.898	544.7
265	337.50	.75000	1356.0	.6430-01	.7910-01	.9080-01	.9220	.4648-02	.3292-02	.6540	4.939	544.0
266	337.50	.76500	1357.0	.6150-01	.7530-01	.8610-01	.9220	.4408-02	.3149-02	.6420	4.852	542.4
266	337.50	.92500	1359.0	.5410-01	.6630-01	.7600-01	.9220	.3890-02	.2768-02	.5590	4.150	544.3
266	337.50	.93200	1360.0	.5700-01	.7000-01	.8030-01	.9220	.4111-02	.2918-02	.5860	4.345	545.5
266	337.50	.93900	1361.0	.6860-01	.8480-01	.9760-01	.9220	.4999-02	.3515-02	.6890	5.099	550.2

PARAMETRIC DATA

ALPHA = 5.000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
269	5.010	-9.000	4.020	72.90	751.0	177.5	.4680	5.290	2624.	.2210-03	.1429-06	4.059
270	4.990	-9.000	4.020	72.80	742.0	175.4	.4670	5.284	2609.	.2235-03	.1412-06	4.128

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
269	.5124-01	.1141-01
270	.5113-01	.1133-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
270	.00000	.80000-02	1310.0	.2181	.2779	.3175	.9272	.1623-01	.1115-01	1.924	14.75	569.7
269	.00000	.25000-01	1311.0	.1315	.1629	.1828	.9272	.9367-02	.6740-02	1.314	9.540	556.2
269	.00000	.83700	1364.0	.4520-01	.5520-01	.6290-01	.9220	.3221-02	.2318-02	.4850	3.602	542.2
269	.00000	.88400	1365.0	.4930-01	.6010-01	.6860-01	.9220	.3514-02	.2525-02	.5260	3.908	543.0
269	.00000	.90700	1366.0	.4340-01	.5310-01	.6070-01	.9220	.3111-02	.2222-02	.4560	3.381	546.1
269	5.0000	.75000-01	1313.0	.4510-01	.5470-01	.6040-01	.9278	.3097-02	.2312-02	.4950	3.566	537.3
269	5.0000	.11000	1314.0	.4800-02	.5700-02	.6200-02	.9278	.3195-03	.2436-03	.5600-01	.4170	523.0
269	20.000	.75000-01	1316.0	.5070-01	.6180-01	.6780-01	.9301	.3472-02	.2599-02	.5430	3.903	542.4
269	20.000	.10000+00	1318.0	.5480-01	.6740-01	.7410-01	.9301	.3799-02	.2810-02	.5670	4.201	549.3
270	20.000	.11000	1319.0	.5710-01	.7030-01	.7740-01	.9301	.3966-02	.2924-02	.5840	4.324	551.3
269	22.500	.72400	1367.0	.2500-01	.3030-01	.3430-01	.9220	.1756-02	.1280-02	.2740	2.084	528.5
269	22.500	.74000	1368.0	.2420-01	.2920-01	.3300-01	.9220	.1693-02	.1239-02	.2710	2.025	532.4
270	22.500	.75000	1369.0	.2260-01	.2730-01	.3090-01	.9220	.1584-02	.1160-02	.2540	1.895	532.4
270	22.500	.76500	1370.0	.1850-01	.2240-01	.2540-01	.9220	.1298-02	.9448-03	.2010	1.531	529.3
269	22.500	.77100	1371.0	.1840-01	.2230-01	.2530-01	.9220	.1294-02	.9418-03	.2000	1.497	529.7
269	22.500	.92500	1372.0	.2260-01	.2740-01	.3110-01	.9220	.1595-02	.1157-02	.2470	1.838	537.9
269	22.500	.93900	1374.0	.3150-01	.3840-01	.4370-01	.9220	.2239-02	.1614-02	.3380	2.517	541.4
269	24.400	.95300	1433.0	.7590-01	.9420-01	.1034	.9315	.5299-02	.3889-02	.7520	5.545	557.9
269	35.000	.75000-01	1321.0	.5210-01	.6350-01	.6870-01	.9328	.3519-02	.2667-02	.5560	4.001	542.6
269	35.000	.11000	1322.0	.7290-01	.9000-01	.9780-01	.9328	.5013-02	.3733-02	.7380	5.545	553.6

IH72, OTS CLEAN, RIGHT SRB HI/HREF (RVZR37)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
269	35.600	.95300	1434.0	.4960-01	.6130-01	.6640-01	.9337	.3400-02	.2541-02	.5010	3.701	554.1
269	40.000	.95300	1435.0	.4320-01	.5330-01	.5750-01	.9346	.2946-02	.2212-02	.4370	3.226	553.9
269	45.000	.74000	1375.0	.2000-01	.2410-01	.2720-01	.9223	.1395-02	.1024-02	.2250	1.707	531.7
269	45.000	.75000	1376.0	.1910-01	.2310-01	.2610-01	.9223	.1337-02	.9809-03	.2150	1.633	532.1
270	45.000	.76500	1377.0	.1580-01	.1910-01	.2170-01	.9223	.1109-02	.8071-03	.1710	1.278	530.5
270	45.000	.77100	1378.0	.1620-01	.1970-01	.2230-01	.9223	.1140-02	.8286-03	.1750	1.309	531.0
270	45.000	.88400	1381.0	.1380-01	.1680-01	.1900-01	.9223	.9705-03	.7080-03	.1510	1.130	529.0
270	45.000	.90700	1382.0	.1100-01	.1330-01	.1510-01	.9223	.7744-03	.5618-03	.1180	.8820	532.2
269	65.000	.11000	1323.0	.1270	.1611	.1713	.9389	.8779-02	.6507-02	1.154	8.301	573.9
269	67.500	.74000	1383.0	.1990-01	.2400-01	.2690-01	.9233	.1380-02	.1018-02	.2230	1.697	531.8
269	67.500	.75000	1384.0	.1570-01	.1900-01	.2140-01	.9233	.1096-02	.8054-03	.1750	1.326	534.2
270	67.500	.77100	1385.0	.1270-01	.1540-01	.1740-01	.9233	.8873-03	.6475-03	.1360	1.019	531.7
269	76.000	.10000+00	1324.0	.8750-01	.1114	.1172	.9410	.6003-02	.4486-02	.7870	5.751	575.8
269	76.000	.14100	1386.0	.8160-01	.9990-01	.1132	.9238	.5799-02	.4182-02	.8580	6.364	546.1
269	76.000	.14800	1387.0	.5910-01	.7170-01	.8080-01	.9238	.4138-02	.3027-02	.6450	4.805	538.1
269	76.000	.15500	1388.0	.5010-01	.6070-01	.6820-01	.9238	.3494-02	.2567-02	.5530	4.127	535.6
269	76.000	.16200	1389.0	.4120-01	.4980-01	.5590-01	.9238	.2863-02	.2111-02	.4600	3.434	533.3
269	76.000	.25000	1390.0	.1290-01	.1550-01	.1730-01	.9238	.8863-03	.6590-03	.1470	1.119	528.1
269	77.500	.95300	1436.0	.2880-01	.3570-01	.3710-01	.9422	.1901-02	.1478-02	.2890	2.131	555.9
269	77.500	.96700	1437.0	.6060-01	.7490-01	.7780-01	.9422	.3988-02	.3105-02	.6090	4.501	554.9
269	77.500	.99400	1439.0	.6710-01	.8350-01	.8680-01	.9422	.4446-02	.3439-02	.6600	4.861	559.4
270	90.000	.15000-01	1325.0	.2535	.3266	.3401	.9431	.1739-01	.1296-01	2.147	15.95	576.6
269	90.000	.25000-01	1326.0	.2588	.3380	.3528	.9431	.1808-01	.1326-01	2.124	15.15	591.0
270	90.000	.40000-01	1327.0	.1916	.2427	.2519	.9431	.1288-01	.9798-02	1.729	12.70	565.8
269	90.000	.60000-01	1328.0	.1281	.1602	.1659	.9431	.8503-02	.6566-02	1.231	8.484	563.8
269	90.000	.75000-01	1329.0	.7810-01	.9560-01	.9870-01	.9431	.5056-02	.4004-02	.8220	5.626	546.0
270	90.000	.13230	1479.0	.1929	.2574	.3100	.9246	.1585-01	.9864-02	1.462	10.59	594.1
270	90.000	.13390	1480.0	.1704	.2196	.2574	.9246	.1316-01	.8712-02	1.442	10.53	576.8
270	90.000	.13560	1481.0	.1423	.1791	.2062	.9246	.1054-01	.7278-02	1.314	9.675	561.7
270	90.000	.13730	1482.0	.1298	.1624	.1860	.9246	.9512-02	.6639-02	1.230	9.076	557.0
270	90.000	.13890	1483.0	.1082	.1343	.1530	.9246	.7823-02	.5530-02	1.056	7.812	551.3
270	90.000	.55000	1391.0	.6170-01	.7550-01	.8510-01	.9246	.4352-02	.3153-02	.6410	4.769	539.1
270	90.000	.65000	1392.0	.4010-01	.4870-01	.5470-01	.9246	.2795-02	.2048-02	.4290	3.203	532.8
269	90.000	.74000	1393.0	.9000-02	.1080-01	.1210-01	.9246	.6217-03	.4586-03	.9900-01	.7510	535.3
269	90.000	.76500	1394.0	.2980-01	.3630-01	.4080-01	.9246	.2089-02	.1525-02	.3200	2.378	541.5
269	90.000	.77100	1395.0	.2730-01	.3330-01	.3740-01	.9246	.1918-02	.1399-02	.2930	2.178	541.8
269	90.000	.81500	1396.0	.7200-02	.8700-02	.9700-02	.9246	.4972-03	.3666-03	.7900-01	.5990	535.7
269	90.000	.83700	1397.0	.5600-02	.6800-02	.7600-02	.9246	.3875-03	.2863-03	.6200-01	.4630	534.5
269	90.000	.88400	1398.0	.1090-01	.1310-01	.1460-01	.9246	.7495-03	.5560-03	.1220	.9110	531.9
269	90.000	.89400	1399.0	.3180-01	.3810-01	.4230-01	.9246	.2170-02	.1631-02	.3720	2.792	523.1
269	90.000	.90700	1400.0	.1500-01	.1820-01	.2040-01	.9246	.1047-02	.7698-03	.1650	1.227	537.2
269	90.000	.91700	1401.0	.1800-01	.2190-01	.2460-01	.9246	.1261-02	.9235-03	.1960	1.456	539.4
269	90.000	.93200	1402.0	.2490-01	.3040-01	.3420-01	.9246	.1752-02	.1275-02	.2660	1.974	542.8

IH72. OTS CLEAN. RIGHT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
269	90.000	.93900	1403.0	.3380-01	.4140-01	.4670-01	.9246	.2394-02	.1734-02	.3560	2.642	545.9
270	95.000	.13560	1484.0	.1622	.2071	.2407	.9248	.1230-01	.8291-02	1.418	10.39	571.2
270	95.000	.13730	1485.0	.1437	.1810	.2082	.9248	.1065-01	.7348-02	1.323	9.734	562.2
270	95.000	.13890	1486.0	.1230	.1539	.1761	.9248	.9005-02	.6290-02	1.164	8.587	557.2
270	95.000	.14560	1487.0	.9670-01	.1201	.1368	.9248	.6994-02	.4943-02	.9400	6.953	552.1
270	95.000	.14730	1488.0	.9150-01	.1131	.1283	.9248	.6561-02	.4678-02	.9090	6.741	547.9
269	104.00	.10000+00	1330.0	.1075	.1394	.1440	.9446	.7379-02	.5510-02	.9060	6.582	586.9
269	104.00	.12000	1404.0	.1866	.2460	.2921	.9252	.1497-01	.9560-02	1.487	10.76	595.6
269	104.00	.12700	1405.0	.1902	.2603	.3187	.9252	.1633-01	.9747-02	1.359	9.760	611.7
269	104.00	.13400	1406.0	.1592	.2026	.2343	.9252	.1200-01	.8157-02	1.431	10.46	575.8
269	104.00	.14100	1407.0	.1371	.1720	.1969	.9252	.1009-01	.7026-02	1.302	9.561	565.9
269	104.00	.14800	1408.0	.9620-01	.1172	.1315	.9252	.6737-02	.4932-02	1.034	7.691	541.5
269	104.00	.15500	1409.0	.9460-01	.1169	.1323	.9252	.6781-02	.4847-02	.9560	7.060	554.1
269	104.00	.16200	1410.0	.8440-01	.1040	.1176	.9252	.6025-02	.4323-02	.8600	6.363	552.2
269	104.00	.18000	1412.0	.6350-01	.7800-01	.8810-01	.9252	.4513-02	.3253-02	.6550	4.847	549.9
269	104.00	.18600	1413.0	.5990-01	.7360-01	.8300-01	.9252	.4255-02	.3070-02	.6190	4.587	549.4
269	104.00	.19300	1414.0	.5350-01	.6560-01	.7400-01	.9252	.3792-02	.2741-02	.5560	4.121	548.3
269	104.00	.20000	1415.0	.5120-01	.6290-01	.7090-01	.9252	.3632-02	.2624-02	.5310	3.936	548.7
269	104.00	.25000	1416.0	.4610-01	.5640-01	.6340-01	.9252	.3250-02	.2360-02	.4840	3.655	545.9
270	112.00	.13560	1489.0	.9540-01	.1192	.1359	.9253	.6951-02	.4875-02	.9050	6.677	556.7
270	112.00	.13730	1490.0	.1070	.1345	.1541	.9253	.7880-02	.5470-02	.9910	7.297	561.1
270	112.00	.13890	1491.0	.1107	.1394	.1599	.9253	.8175-02	.5660-02	1.019	7.501	562.2
270	112.00	.14560	1492.0	.3100-01	.3800-01	.4270-01	.9253	.2184-02	.1584-02	.3200	2.380	540.4
269	112.50	.74000	1417.0	.4610-01	.5650-01	.6370-01	.9254	.3262-02	.2360-02	.4790	3.547	548.3
269	112.50	.75000	1418.0	.4510-01	.5530-01	.6230-01	.9254	.3190-02	.2310-02	.4700	3.482	547.9
270	112.50	.77100	1419.0	.4450-01	.5450-01	.6140-01	.9253	.3139-02	.2275-02	.4580	3.464	540.9
269	112.50	.92500	1420.0	.1940-01	.2360-01	.2650-01	.9254	.1357-02	.9958-03	.2100	1.561	540.4
269	112.50	.93200	1421.0	.2570-01	.3140-01	.3520-01	.9254	.1804-02	.1317-02	.2740	2.036	543.2
269	112.50	.93900	1422.0	.3490-01	.4280-01	.4820-01	.9254	.2469-02	.1791-02	.3680	2.711	547.0
269	112.50	.95300	1440.0	.2700-01	.3370-01	.3430-01	.9460	.1759-02	.1384-02	.2640	1.941	560.8
270	112.50	.96700	1441.0	.5810-01	.7310-01	.7460-01	.9460	.3815-02	.2970-02	.5380	3.957	561.3
270	112.50	.99400	1443.0	.5100-01	.6500-01	.6640-01	.9460	.3397-02	.2605-02	.4480	3.285	570.3
269	135.00	.25000-01	1332.0	.2688	.3581	.3717	.9445	.1905-01	.1378-01	2.075	14.98	600.5
270	135.00	.50000-01	1333.0	.2120	.2735	.2826	.9445	.1445-01	.1084-01	1.789	13.07	577.2
269	135.00	.75000-01	1334.0	.1158	.1461	.1504	.9445	.7706-02	.5933-02	1.075	8.015	570.0
269	135.00	.10000+00	1335.0	.1344	.1717	.1771	.9445	.9075-02	.6886-02	1.190	8.688	578.4
269	135.00	.40000	1423.0	.8070-01	.1003	.1140	.9251	.5841-02	.4137-02	.7980	5.981	558.4
270	135.00	.92500	1424.0	.2560-01	.3160-01	.3580-01	.9251	.1830-02	.1310-02	.2570	1.904	546.4
270	140.00	.13560	1494.0	.6340-01	.7830-01	.8870-01	.9249	.4536-02	.3240-02	.6320	4.684	547.3
270	140.00	.13730	1495.0	.6290-01	.7780-01	.8830-01	.9249	.4513-02	.3214-02	.6220	4.611	548.7
270	140.00	.13890	1496.0	.6280-01	.7800-01	.8880-01	.9249	.4539-02	.3210-02	.6110	4.518	552.0
270	140.00	.14560	1497.0	.6490-01	.8050-01	.9160-01	.9249	.4685-02	.3317-02	.6320	4.679	551.6
270	150.00	.14230	1499.0	.6410-01	.7970-01	.9100-01	.9245	.4652-02	.3278-02	.6220	4.599	552.5

IH72. OTS CLEAN. RIGHT SRB HI/HREF (RVZR37)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
270	180.00	.80000-02	1298.0	.3100	.4238	.4668	.9374	.2387-01	.1585-01	2.192	16.63	604.0
270	180.00	.15000-01	1299.0	.2472	.3174	.3418	.9374	.1748-01	.1264-01	2.120	15.25	574.5
269	180.00	.25000-01	1300.0	.2555	.3338	.3616	.9375	.1853-01	.1309-01	2.096	14.48	591.1
270	180.00	.50000-01	1301.0	.2137	.2726	.2928	.9374	.1497-01	.1093-01	1.879	13.12	570.4
269	180.00	.75000-01	1302.0	.1347	.169;	.1807	.9375	.9257-02	.6901-02	1.274	8.766	566.7
270	180.00	.10000+00	1303.0	.1640	.2099	.2258	.9374	.1154-01	.8388-02	1.424	10.43	572.5
269	225.00	.98000	1425.0	.6190-01	.7770-01	.8670-01	.9296	.4442-02	.3172-02	.5870	4.310	566.2
269	263.00	.13600	1336.0	.1910-01	.2290-01	.2580-01	.9220	.1323-02	.9763-03	.2180	1.634	527.6
270	263.00	.20000	1472.0	.1100-01	.1320-01	.1490-01	.9220	.7626-03	.5626-03	.1240	.9330	521.6
270	263.00	.30000	1337.0	.1630-01	.1960-01	.2210-01	.9220	.1131-02	.8317-03	.1820	1.389	523.4
270	263.00	.40000	1473.0	.1480-01	.1790-01	.2030-01	.9220	.1040-02	.7562-03	.1610	1.201	529.9
270	263.00	.50000	1474.0	.2250-01	.2730-01	.3100-01	.9220	.1585-02	.1150-02	.2420	1.810	531.6
270	263.00	.60000	1475.0	.2430-01	.2950-01	.3350-01	.9220	.1713-02	.1244-02	.2630	1.970	530.6
270	263.00	.75000	1338.0	.3250-01	.3940-01	.4470-01	.9220	.2288-02	.1660-02	.3500	2.618	531.3
270	263.00	.81500	1339.0	.3510-01	.4260-01	.4840-01	.9220	.2477-02	.1794-02	.3770	2.816	532.2
270	263.00	.83700	1340.0	.3480-01	.4220-01	.4800-01	.9220	.2454-02	.1778-02	.3740	2.794	532.0
270	263.00	.88400	1341.0	.3990-01	.4850-01	.5520-01	.9220	.2825-02	.2041-02	.4260	3.179	533.6
270	263.00	.89400	1342.0	.4210-01	.5120-01	.5830-01	.9220	.2982-02	.2153-02	.4480	3.344	534.1
270	263.00	.92800	1477.0	.4830-01	.5900-01	.6740-01	.9220	.3445-02	.2471-02	.5060	3.768	537.6
269	263.00	.93900	1344.0	.5950-01	.7300-01	.8350-01	.9220	.4281-02	.3051-02	.6220	4.614	547.2
270	270.00	.80000-02	1304.0	.1721	.2147	.2456	.9246	.1256-01	.8800-02	1.646	13.02	555.3
270	270.00	.50000-01	1306.0	.9550-01	.1169	.1319	.9246	.6746-02	.4885-02	.9910	7.023	539.5
269	270.00	.75000-01	1307.0	.6260-01	.7600-01	.8530-01	.9246	.4371-02	.3207-02	.6820	4.839	538.5
270	270.00	.10000+00	1308.0	.8480-01	.1042	.1178	.9246	.6026-02	.4337-02	.8660	6.438	542.5
269	270.00	.11500	1345.0	.6410-01	.7900-01	.9080-01	.9220	.4654-02	.3283-02	.6530	4.831	552.2
269	277.00	.13600	1346.0	.2020-01	.2430-01	.2740-01	.9220	.1405-02	.1034-02	.2300	1.720	529.0
269	277.00	.30000	1347.0	.1540-01	.1860-01	.2100-01	.9220	.1074-02	.7908-03	.1760	1.339	528.8
270	277.00	.40000	1464.0	.1740-01	.2110-01	.2390-01	.9220	.1221-02	.8901-03	.1900	1.424	528.6
270	277.00	.60000	1466.0	.2380-01	.2870-01	.3250-01	.9220	.1662-02	.1215-02	.2620	1.961	526.8
270	277.00	.70000	1467.0	.2840-01	.3460-01	.3940-01	.9220	.2013-02	.1454-02	.3030	2.263	533.8
269	277.00	.75000	1348.0	.3310-01	.4020-01	.4560-01	.9220	.2337-02	.1697-02	.3630	2.705	537.3
269	277.00	.81500	1349.0	.3070-01	.3730-01	.4240-01	.9220	.2171-02	.1574-02	.3350	2.496	538.3
269	277.00	.83700	1350.0	.3240-01	.3940-01	.4480-01	.9220	.2294-02	.1660-02	.3520	2.617	539.4
269	277.00	.88400	1351.0	.3100-01	.3760-01	.4270-01	.9220	.2190-02	.1589-02	.3390	2.526	537.8
269	277.00	.89400	1352.0	.3210-01	.3890-01	.4430-01	.9220	.2268-02	.1643-02	.3490	2.601	538.6
270	277.00	.90000	1468.0	.3240-01	.3950-01	.4490-01	.9220	.2297-02	.1658-02	.3450	2.574	534.3
270	277.00	.90700	1353.0	.3240-01	.3940-01	.4490-01	.9220	.2294-02	.1656-02	.3450	2.571	534.2
270	277.00	.92100	1469.0	.3310-01	.4040-01	.4600-01	.9220	.2353-02	.1695-02	.3510	2.618	535.2
270	277.00	.92800	1470.0	.3630-01	.4430-01	.5050-01	.9220	.2583-02	.1856-02	.3820	2.850	536.4
270	277.00	.93700	1471.0	.3670-01	.4490-01	.5120-01	.9220	.2619-02	.1877-02	.3840	2.860	537.8
269	277.00	.93900	1354.0	.4820-01	.5920-01	.6780-01	.9220	.3474-02	.2471-02	.5010	3.715	548.3
270	335.00	.11000	1309.0	.8410-01	.1036	.1171	.9250	.5990-02	.4300-02	.8490	6.301	544.9
269	337.50	.74000	1355.0	.2670-01	.3220-01	.3640-01	.9220	.1867-02	.1367-02	.2990	2.234	532.4

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN,

RIGHT SRB

HI/HREF

(RVZR37)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
269	337.50	.75000	1356.0	.2520-01	.3030-01	.3430-01	.9220	.1758-02	.1289-02	.2830	2.152	531.6
270	337.50	.76500	1357.0	.2550-01	.3090-01	.3500-01	.9220	.1788-02	.1305-02	.2790	2.126	528.2
270	337.50	.92500	1359.0	.4890-01	.6000-01	.6870-01	.9220	.3513-02	.2502-02	.5030	3.740	541.2
270	337.50	.93200	1360.0	.5490-01	.6740-01	.7730-01	.9220	.3952-02	.2808-02	.5610	4.172	542.4
270	337.50	.93900	1361.0	.7470-01	.9220-01	.1060	.9220	.5421-02	.3821-02	.7490	5.558	546.2

IH72, RIGHT SRB W/PROTUBERANCES HU/HREF (RVZR47)

RIGHT SRB

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
144	-.2000-01	.0000	3.010	37.10	704.0	250.4	.9960	6.316	2334.	.3337-03	.2003-06	3.888
145	-.2000-01	.0000	3.010	37.10	706.0	250.9	.9950	6.311	2336.	.3327-03	.2007-06	3.872

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
144	.5545-01	.9197-02
145	.5544-01	.9214-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
145	.00000	.80000-02	1310.0	.2674	.3486	.3655	.9424	.2026-01	.1482-01	2.244	17.33	554.3
144	.00000	.25000-01	1311.0	.2444	.3191	.3346	.9424	.1855-01	.1355-01	2.039	14.82	553.6
144	.00000	.83700	1364.0	.5850-01	.7590-01	.8350-01	.9345	.4632-02	.3245-02	.4990	3.698	550.1
144	.00000	.88400	1365.0	.1072	.1451	.1629	.9345	.9034-02	.5942-02	.8000	5.869	569.4
144	.00000	.90700	1366.0	.8730-01	.1165	.1300	.9345	.7211-02	.4840-02	.6790	4.993	563.8
144	5.0000	.75000-01	1313.0	.2095	.2737	.2870	.9424	.1591-01	.1162-01	1.744	12.47	554.0
144	5.0000	.11000	1314.0	.6530-01	.8050-01	.8350-01	.9424	.4628-02	.3622-02	.6760	5.086	517.5
144	15.600	.95300	1431.0	.1791	.2483	.2624	.9430	.1455-01	.9933-02	1.256	9.170	577.6
144	20.000	.75000-01	1316.0	.1996	.2610	.2737	.9424	.1518-01	.1107-01	1.658	11.85	554.3
144	20.000	.10000+00	1318.0	.1951	.2559	.2686	.9424	.1489-01	.1082-01	1.601	11.82	556.0
144	20.000	.11000	1319.0	.2045	.2677	.2809	.9424	.1558-01	.1134-01	1.689	12.47	555.1
144	20.000	.95300	1432.0	.1850	.2562	.2706	.9430	.1501-01	.1026-01	1.300	9.491	577.4
145	22.500	.72400	1367.0	.9240-01	.1198	.1320	.9345	.7317-02	.5125-02	.7910	5.952	551.3
144	22.500	.74000	1368.0	.1387	.1863	.2085	.9345	.1156-01	.7693-02	1.060	7.787	566.3
144	22.500	.75000	1369.0	.2326	.3307	.3806	.9345	.2110-01	.1289-01	1.529	11.12	585.5
145	22.500	.76500	1370.0	.1193	.1537	.1688	.9345	.9359-02	.6616-02	1.044	7.865	547.9
145	22.500	.77100	1371.0	.7640-01	.9620-01	.1045	.9345	.5797-02	.4237-02	.7280	5.435	533.8
144	22.500	.92500	1372.0	.1028	.1336	.1472	.9345	.8163-02	.5700-02	.8710	6.447	551.2
144	22.500	.93900	1374.0	.1299	.1727	.1923	.9345	.1067-01	.7200-02	1.022	7.520	562.1
144	24.400	.95300	1433.0	.1881	.2568	.2706	.9430	.1500-01	.1043-01	1.372	10.04	572.5

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, RIGHT SRB W/PROTUBERANCES

(RVZR47)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
144	35.000	.75000-01	1321.0	.2105	.2781	.2923	.9424	.1621-01	.1167-01	1.692	12.07	559.1
144	35.000	.11000	1322.0	.1994	.2609	.2738	.9424	.1518-01	.1106-01	1.651	12.40	554.8
144	35.600	.95300	1434.0	.1667	.2223	.2332	.9430	.1293-01	.9242-02	1.300	9.558	563.4
144	40.000	.95300	1435.0	.1515	.2010	.2105	.9430	.1167-01	.8402-02	1.202	8.850	561.0
144	45.000	.74000	1375.0	.1479	.1955	.2171	.9345	.1204-01	.8199-02	1.185	8.880	559.5
144	45.000	.75000	1376.0	.1970	.2666	.2994	.9345	.1660-01	.1092-01	1.472	10.97	569.3
145	45.000	.76500	1377.0	.1144	.1452	.1584	.9345	.8783-02	.6342-02	1.055	7.853	539.3
145	45.000	.77100	1378.0	.9030-01	.1140	.1241	.9345	.6882-02	.5004-02	.8480	6.321	536.2
145	45.000	.88400	1381.0	.1282	.1677	.1854	.9345	.1028-01	.7109-02	1.065	7.863	555.8
145	45.000	.90700	1382.0	.1111	.1440	.1586	.9345	.8795-02	.6159-02	.9500	7.026	551.5
144	65.000	.11000	1323.0	.2005	.2630	.2761	.9424	.1531-01	.1112-01	1.647	11.96	556.0
144	67.500	.74000	1383.0	.1338	.1765	.1959	.9345	.1086-01	.7420-02	1.080	8.100	558.5
144	67.500	.75000	1384.0	.1409	.1888	.2110	.9345	.1170-01	.7815-02	1.085	8.108	565.2
145	67.500	.77100	1385.0	.8920-01	.1130	.1232	.9345	.6829-02	.4946-02	.8290	6.175	538.0
144	76.000	.10000+00	1324.0	.2002	.2630	.2762	.9424	.1531-01	.1110-01	1.637	12.08	556.7
144	76.000	.14100	1386.0	.1144	.1496	.1653	.9345	.9167-02	.6344-02	.9500	7.020	554.3
144	76.000	.14800	1387.0	.9400-01	.1201	.1314	.9345	.7285-02	.5214-02	.8460	6.287	541.9
144	76.000	.15500	1388.0	.7720-01	.9800-01	.1069	.9345	.5928-02	.4282-02	.7110	5.299	538.0
144	76.000	.16200	1389.0	.6900-01	.8740-01	.9540-01	.9345	.5287-02	.3825-02	.6380	4.754	537.3
144	76.000	.25000	1390.0	.5730-01	.7240-01	.7880-01	.9345	.4370-02	.3177-02	.5360	4.069	535.2
144	77.500	.95300	1436.0	.1110	.1438	.1500	.9430	.8316-02	.6156-02	.9510	7.043	549.6
144	77.500	.96700	1437.0	.1318	.1764	.1851	.9430	.1026-01	.7309-02	1.019	7.486	564.7
144	77.500	.99400	1439.0	.1426	.1939	.2042	.9430	.1132-01	.7907-02	1.052	7.707	571.0
145	90.000	.15000-01	1325.0	.1901	.2441	.2551	.9424	.1414-01	.1054-01	1.680	12.67	546.2
144	90.000	.25000-01	1326.0	.2261	.2989	.3143	.9424	.1743-01	.1254-01	1.813	13.14	559.5
145	90.000	.40000-01	1327.0	.2477	.3262	.3427	.9424	.1900-01	.1373-01	2.013	14.83	559.1
144	90.000	.60000-01	1328.0	.2469	.3251	.3415	.9424	.1894-01	.1369-01	2.004	13.85	557.7
144	90.000	.75000-01	1329.0	.1764	.2288	.2396	.9424	.1329-01	.9782-02	1.504	10.28	550.3
145	90.000	.13230	1479.0	.1181	.1519	.1666	.9345	.9239-02	.6546-02	1.038	7.695	547.1
145	90.000	.13390	1480.0	.1228	.1612	.1786	.9345	.9901-02	.6807-02	1.007	7.425	557.8
145	90.000	.13560	1481.0	.1319	.1769	.1979	.9345	.1097-01	.7312-02	1.013	7.436	567.1
145	90.000	.13730	1482.0	.1383	.1876	.2109	.9345	.1169-01	.7667-02	1.029	7.538	571.4
145	90.000	.13890	1483.0	.1322	.1817	.2055	.9345	.1139-01	.7332-02	.9500	6.946	576.0
145	90.000	.55000	1391.0	.1017	.1288	.1405	.9345	.7789-02	.5637-02	.9430	7.024	538.3
144	90.000	.65000	1392.0	.9290-01	.1184	.1294	.9345	.7173-02	.5151-02	.8450	6.280	541.7
144	90.000	.74000	1393.0	.2810-01	.3570-01	.3890-01	.9345	.2159-02	.1556-02	.2570	1.946	538.9
144	90.000	.76500	1394.0	.1017	.1278	.1389	.9345	.7703-02	.5639-02	.9700	7.251	532.9
144	90.000	.77100	1395.0	.8310-01	.1048	.1140	.9345	.6324-02	.4610-02	.7850	5.857	533.9
144	90.000	.81500	1396.0	.8000-01	.1022	.1118	.9345	.6201-02	.4437-02	.7190	5.438	541.9
144	90.000	.83700	1397.0	.7800-01	.9990-01	.1094	.9345	.6065-02	.4327-02	.6960	5.174	543.1
144	90.000	.88400	1398.0	.1122	.1458	.1608	.9345	.8914-02	.6223-02	.9500	7.031	551.3
144	90.000	.89400	1399.0	.9230-01	.1173	.1281	.9345	.7103-02	.5119-02	.8450	6.291	539.0
144	90.000	.90700	1400.0	.1003	.1292	.1419	.9345	.7867-02	.5562-02	.8750	6.490	546.7

IH72, RIGHT SRB W/PROTUBERANCES HU/HREF (RVZR47)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
144	90.000	.91700	1401.0	.7430-01	.9440-01	.1030	.9345	.5711-02	.4121-02	.6820	5.080	538.5
144	90.000	.93200	1402.0	.8840-01	.1142	.1255	.9345	.6959-02	.4901-02	.7640	5.662	548.2
144	90.000	.93900	1403.0	.1023	.1326	.1460	.9345	.8095-02	.5670-02	.8730	6.464	550.1
145	95.000	.13560	1484.0	.1300	.1725	.1920	.9345	.1064-01	.7206-02	1.031	7.589	562.5
145	95.000	.13890	1486.0	.1247	.1664	.1857	.9345	.1030-01	.6911-02	.9720	7.140	565.1
145	95.000	.14560	1487.0	.1073	.1376	.1508	.9345	.8361-02	.5952-02	.9540	7.084	545.3
145	95.000	.14730	1488.0	.9210-01	.1173	.1281	.9345	.7102-02	.5107-02	.8400	6.249	541.1
144	104.00	.10000+00	1330.0	.1905	.2518	.2648	.9424	.1468-01	.1056-01	1.527	11.25	559.5
144	104.00	.12000	1404.0	.1129	.1449	.1589	.9345	.8811-02	.6259-02	.9970	7.397	544.9
144	104.00	.12700	1405.0	.1192	.1539	.1692	.9345	.9382-02	.6608-02	1.030	7.636	548.1
144	104.00	.13400	1406.0	.1319	.1752	.1950	.9345	.1081-01	.7316-02	1.043	7.679	561.5
144	104.00	.14100	1407.0	.1276	.1686	.1872	.9345	.1038-01	.7073-02	1.024	7.542	559.4
144	104.00	.14800	1408.0	.9840-01	.1254	.1371	.9345	.7601-02	.5454-02	.8900	6.622	540.8
144	104.00	.15500	1409.0	.7740-01	.9880-01	.1081	.9345	.5996-02	.4290-02	.6960	5.171	541.9
144	104.00	.15200	1410.0	.7530-01	.9570-01	.1045	.9345	.5795-02	.4174-02	.6880	5.122	539.2
144	104.00	.17300	1411.0	.7560-01	.9600-01	.1047	.9345	.5806-02	.4191-02	.6950	5.175	538.3
144	104.00	.18000	1412.0	.7600-01	.9650-01	.1053	.9345	.5837-02	.4217-02	.7010	5.219	537.9
144	104.00	.18600	1413.0	.7700-01	.9760-01	.1065	.9345	.5904-02	.4268-02	.7110	5.293	537.6
144	104.00	.19300	1414.0	.8040-01	.1022	.1116	.9345	.6189-02	.4457-02	.7340	5.466	539.3
144	104.00	.20000	1415.0	.8200-01	.1045	.1142	.9345	.6331-02	.4546-02	.7440	5.533	540.5
144	104.00	.25000	1416.0	.8470-01	.1082	.1184	.9345	.6564-02	.4698-02	.7620	5.762	541.8
145	112.00	.13560	1489.0	.8310-01	.1057	.1155	.9345	.6402-02	.4606-02	.7590	5.645	540.9
145	112.00	.13730	1490.0	.9210-01	.1189	.1307	.9345	.7247-02	.5104-02	.7980	5.910	549.3
145	112.00	.13890	1491.0	.9430-01	.1221	.1344	.9345	.7452-02	.5228-02	.8100	5.995	550.7
145	112.00	.14560	1492.0	.1870-01	.2330-01	.2530-01	.9345	.1402-02	.1036-02	.1830	1.372	528.6
145	112.00	.14730	1493.0	.6680-01	.8480-01	.9260-01	.9345	.5133-02	.3702-02	.6140	4.567	539.9
144	112.50	.74000	1417.0	.1296	.1748	.1959	.9345	.1086-01	.7186-02	.9790	7.183	567.9
144	112.50	.75000	1418.0	.1461	.2015	.2283	.9345	.1266-01	.8102-02	1.038	7.587	575.9
145	112.50	.77100	1419.0	.9430-01	.1192	.1298	.9345	.7198-02	.5229-02	.8830	6.696	536.7
144	112.50	.92500	1420.0	.8620-01	.1098	.1199	.9345	.6651-02	.4780-02	.7840	5.834	540.1
144	112.50	.93200	1421.0	.8530-01	.1109	.1222	.9345	.6775-02	.4731-02	.7230	5.350	551.2
144	112.50	.93900	1422.0	.9680-01	.1262	.1393	.9345	.7727-02	.5365-02	.8090	5.983	553.2
144	112.50	.95300	1440.0	.1286	.1683	.1759	.9430	.9755-02	.7132-02	1.064	7.858	554.9
145	112.50	.96700	1441.0	.1715	.2295	.2409	.9430	.1335-01	.9507-02	1.327	9.748	566.0
145	112.50	.99400	1443.0	.1353	.1878	.1986	.9430	.1101-01	.7501-02	.9460	6.904	579.5
145	135.00	.80000-02	1331.0	.2583	.3448	.3633	.9424	.2014-01	.1432-01	2.015	15.59	565.0
144	135.00	.25000-01	1332.0	.2174	.2916	.3076	.9424	.1705-01	.1205-01	1.667	12.24	565.8
145	135.00	.50000-01	1333.0	.2273	.3007	.3163	.9424	.1754-01	.1260-01	1.820	13.40	561.2
144	135.00	.75000-01	1334.0	.1534	.2006	.2104	.9424	.1167-01	.8507-02	1.273	9.567	554.4
144	135.00	.10000+00	1335.0	.1806	.2394	.2519	.9424	.1397-01	.1001-01	1.436	10.57	560.7
144	135.00	.40000	1423.0	.7950-01	.1030	.1134	.9345	.6285-02	.4411-02	.6820	5.136	549.5
145	135.00	.92500	1424.0	.8330-01	.1098	.1219	.9345	.6757-02	.4619-02	.6750	4.970	559.6
145	140.00	.13560	1494.0	.6370-01	.8060-01	.8780-01	.9345	.4868-02	.3534-02	.5960	4.445	536.9

IH72, RIGHT SRB W/PROTUBERANCES

HU/HREF

(RVZR47)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
145	140.00	.13730	1495.0	.7070-01	.9010-01	.9850-01	.9345	.5464-02	.3920-02	.6410	4.769	542.0
145	140.00	.13890	1496.0	.7240-01	.9380-01	.1033	.9345	.5728-02	.4012-02	.6190	4.580	551.3
145	140.00	.14560	1497.0	.8140-01	.1039	.1136	.9345	.6301-02	.4515-02	.7360	5.470	542.6
145	150.00	.14230	1499.0	.7270-01	.9300-01	.1018	.9345	.5642-02	.4029-02	.6510	4.834	544.1
145	180.00	.80000-02	1298.0	.2862	.3897	.4124	.9424	.2286-01	.1587-01	2.108	16.24	572.8
144	180.00	.15000-01	1299.0	.1802	.2332	.2442	.9424	.1354-01	.9989-02	1.550	11.28	550.5
145	180.00	.25000-01	1300.0	.2804	.3634	.3805	.9424	.2110-01	.1555-01	2.396	16.89	550.0
144	180.00	.50000-01	1301.0	.2315	.3048	.3203	.9424	.1776-01	.1283-01	1.882	13.21	559.0
145	180.00	.75000-01	1302.0	.1472	.1918	.2011	.9424	.1115-01	.8159-02	1.235	8.558	552.8
144	180.00	.10000+00	1303.0	.1774	.2372	.2500	.9424	.1386-01	.9833-02	1.376	10.11	565.7
144	225.00	.98000	1425.0	.1022	.1461	.1555	.9430	.8620-02	.5668-02	.6640	4.826	586.9
144	225.00	.99400	1426.0	.4930-01	.7040-01	.7490-01	.9430	.4155-02	.2733-02	.3200	2.329	586.9
144	263.00	.13600	1336.0	.6860-01	.8650-01	.9420-01	.9345	.5221-02	.3803-02	.6460	4.822	534.2
145	263.00	.20000	1472.0	.6470-01	.8020-01	.8670-01	.9345	.4806-02	.3587-02	.6540	4.908	523.3
145	263.00	.30000	1337.0	.6960-01	.8630-01	.9330-01	.9345	.5173-02	.3860-02	.7030	5.363	523.6
145	263.00	.40000	1473.0	.5910-01	.7390-01	.8020-01	.9345	.4446-02	.3276-02	.5750	4.303	530.0
145	263.00	.50000	1474.0	.5620-01	.6980-01	.7550-01	.9345	.4184-02	.3114-02	.5630	4.221	524.9
145	263.00	.60000	1475.0	.5740-01	.7130-01	.7720-01	.9345	.4278-02	.3180-02	.5730	4.294	525.5
145	263.00	.75000	1338.0	.6680-01	.8490-01	.9270-01	.9345	.5141-02	.3701-02	.6110	4.543	540.6
145	263.00	.81500	1339.0	.5460-01	.6730-01	.7250-01	.9345	.4020-02	.3030-02	.5690	4.279	518.0
145	263.00	.83700	1340.0	.4150-01	.5140-01	.5540-01	.9345	.3074-02	.2301-02	.4230	3.174	521.9
145	263.00	.88400	1341.0	.6450-01	.8210-01	.8970-01	.9345	.4971-02	.3578-02	.5900	4.388	540.8
145	263.00	.89400	1342.0	.8580-01	.1062	.1147	.9345	.6360-02	.4756-02	.8710	6.541	522.5
145	263.00	.90700	1343.0	.6090-01	.7700-01	.8380-01	.9345	.4648-02	.3375-02	.5690	4.244	536.9
145	263.00	.92800	1477.0	.6490-01	.8110-01	.8790-01	.9345	.4873-02	.3600-02	.6370	4.767	528.7
144	263.00	.93900	1344.0	.7520-01	.9590-01	.1048	.9345	.5812-02	.4171-02	.6810	5.065	540.8
145	270.00	.80000-02	1304.0	.2483	.3238	.3395	.9424	.1882-01	.1376-01	2.082	16.48	554.4
145	270.00	.50000-01	1306.0	.2423	.3173	.3329	.9424	.1846-01	.1343-01	2.005	14.09	556.4
144	270.00	.75000-01	1307.0	.1701	.2206	.2310	.9424	.1281-01	.9431-02	1.450	10.23	550.3
145	270.00	.10000+00	1308.0	.1967	.2598	.2730	.9424	.1514-01	.1091-01	1.587	11.69	560.2
144	270.00	.11500	1345.0	.1416	.1895	.2117	.9345	.1174-01	.7853-02	1.094	8.039	564.8
144	277.00	.13600	1346.0	.5700-01	.7150-01	.7770-01	.9345	.4309-02	.3160-02	.5460	4.084	531.1
144	277.00	.30000	1347.0	.6920-01	.8520-01	.9180-01	.9345	.5091-02	.3836-02	.7180	5.496	517.0
145	277.00	.40000	1464.0	.6530-01	.8100-01	.8750-01	.9345	.4851-02	.3618-02	.6580	4.936	523.8
145	277.00	.60000	1466.0	.7730-01	.9550-01	.1030	.9345	.5710-02	.4288-02	.7950	5.978	520.2
145	277.00	.70000	1467.0	.7210-01	.8920-01	.9620-01	.9345	.5336-02	.3999-02	.7370	5.540	521.2
144	277.00	.75000	1348.0	.1135	.1426	.1549	.9345	.8589-02	.6291-02	1.084	8.104	531.7
144	277.00	.81500	1349.0	.7960-01	.9810-01	.1057	.9345	.5859-02	.4415-02	.8260	6.219	517.0
144	277.00	.83700	1350.0	.7830-01	.9690-01	.1047	.9345	.5803-02	.4343-02	.7960	5.982	520.8
144	277.00	.88400	1351.0	.1024	.1285	.1396	.9345	.7740-02	.5676-02	.9820	7.339	531.1
145	277.00	.89400	1352.0	.7700-01	.9560-01	.1034	.9345	.5732-02	.4267-02	.7700	5.781	523.6
145	277.00	.90000	1468.0	.8260-01	.1027	.1110	.9345	.6156-02	.4582-02	.8280	6.208	525.0
145	277.00	.90700	1353.0	.9550-01	.1188	.1285	.9345	.7124-02	.5296-02	.9540	7.153	525.5

IH72, RIGHT SRB W/PROTUBERANCES HU/HREF (RVZR47)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
145	277.00	.92100	1469.0	.7800-01	.9560-01	.1028	.9345	.5700-02	.4324-02	.8280	6.241	514.2
145	277.00	.92800	1470.0	.8640-01	.1068	.1153	.9345	.6391-02	.4791-02	.8850	6.649	521.0
145	277.00	.93700	1471.0	.8680-01	.1080	.1168	.9345	.6476-02	.4815-02	.8670	6.503	525.5
144	277.00	.93900	1354.0	.9310-01	.1170	.1270	.9345	.7044-02	.5164-02	.8920	6.670	531.3
145	335.00	.11000	1309.0	.2069	.2709	.2843	.9424	.1576-01	.1147-01	1.712	12.64	556.4
144	337.50	.74000	1355.0	.1243	.1682	.1889	.9345	.1047-01	.6891-02	.9290	6.812	569.3
144	337.50	.75000	1356.0	.1153	.1615	.1843	.9345	.1022-01	.6394-02	.7870	5.838	580.9
145	337.50	.76500	1357.0	.7760-01	.9780-01	.1064	.9345	.5899-02	.4302-02	.7350	5.575	534.9
145	337.50	.92500	1359.0	.9930-01	.1272	.1394	.9345	.7728-02	.5508-02	.8860	6.577	544.8
145	337.50	.93200	1360.0	.1120	.1446	.1589	.9345	.8810-02	.6209-02	.9720	7.201	549.1
145	337.50	.93900	1361.0	.1198	.1560	.1721	.9345	.9539-02	.6644-02	1.012	7.480	553.3

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
142	.1000-01	.0000	4.020	72.30	752.0	177.6	.4640	5.246	2625.	.2191-03	.1430-06	4.023
143	-.1000-01	.0000	4.020	72.40	751.0	177.5	.4650	5.256	2624.	.2196-03	.1429-06	4.033

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
142	.5103-01	.1146-01
143	.5107-01	.1144-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
143	.00000	.80000-02	1310.0	.2539	.3124	.3406	.9320	.1740-01	.1297-01	2.601	20.13	550.5
142	.00000	.25000-01	1311.0	.1759	.2131	.2306	.9320	.1177-01	.8978-02	1.936	14.20	535.9
142	.00000	.83700	1364.0	.4120-01	.5020-01	.5720-01	.9220	.2921-02	.2102-02	.4390	3.264	542.5
142	.00000	.88400	1365.0	.7340-01	.9120-01	.1056	.9220	.5389-02	.3744-02	.7190	5.296	559.5
142	.00000	.90700	1366.0	.5790-01	.7140-01	.8210-01	.9220	.4192-02	.2952-02	.5850	4.327	553.2
142	5.0000	.75000-01	1313.0	.1682	.2055	.2234	.9320	.1140-01	.8582-02	1.776	12.76	544.6
142	5.0000	.11000	1314.0	.3390-01	.4000-01	.4280-01	.9320	.2183-02	.1730-02	.4270	3.232	504.9
142	15.600	.95300	1431.0	.1239	.1534	.1671	.9327	.8529-02	.6323-02	1.237	9.128	556.0
142	20.000	.75000-01	1316.0	.1661	.2030	.2207	.9320	.1126-01	.8477-02	1.753	12.59	544.8
142	20.000	.10000+00	1318.0	.1825	.2246	.2449	.9320	.1250-01	.9312-02	1.867	13.82	551.0
142	20.000	.11000	1319.0	.1838	.2256	.2458	.9320	.1254-01	.9381-02	1.902	14.09	548.8
142	20.000	.95300	1432.0	.1371	.1692	.1841	.9327	.9396-02	.6996-02	1.385	10.24	553.5
143	22.500	.72400	1367.0	.5650-01	.6870-01	.7820-01	.9220	.3992-02	.2886-02	.6100	4.619	539.7
142	22.500	.74000	1368.0	.1398	.1721	.1977	.9220	.1009-01	.7135-02	1.428	10.57	551.4
142	22.500	.75000	1369.0	.2034	.2562	.2998	.9220	.1530-01	.1038-01	1.892	13.88	569.2
143	22.500	.76500	1370.0	.8700-01	.1053	.1193	.9220	.6093-02	.4442-02	.9610	7.288	534.9
143	22.500	.77100	1371.0	.5080-01	.6090-01	.6850-01	.9220	.3499-02	.2596-02	.5890	4.421	524.1
142	22.500	.92500	1372.0	.7360-01	.8920-01	.1011	.9220	.5161-02	.3757-02	.8100	6.037	536.0
142	22.500	.93900	1374.0	.9110-01	.1110	.1265	.9220	.6456-02	.4648-02	.9730	7.231	542.2
142	24.400	.95300	1433.0	.1367	.1676	.1819	.9327	.9282-02	.6977-02	1.421	10.53	547.9

IH72, RIGHT SRB W/PROTUBERANCES HU/HREF (RVZR48)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
142	35.000	.75000-01	1321.0	.1853	.2274	.2477	.9320	.1264-01	.9458-02	1.922	13.78	548.3
142	35.000	.11000	1322.0	.1783	.2188	.2383	.9320	.1216-01	.9099-02	1.848	13.92	548.5
142	35.600	.95300	1434.0	.1238	.1505	.1626	.9327	.8296-02	.6316-02	1.338	9.959	539.7
142	40.000	.95300	1435.0	.1080	.1312	.1417	.9327	.7229-02	.5513-02	1.174	8.746	538.5
142	45.000	.74000	1375.0	.1285	.1572	.1797	.9220	.9171-02	.6558-02	1.349	10.18	545.8
142	45.000	.75000	1376.0	.1685	.2075	.2383	.9220	.1216-01	.8600-02	1.721	12.95	551.3
143	45.000	.76500	1377.0	.7110-01	.8540-01	.9620-01	.9220	.4915-02	.3631-02	.8150	6.102	526.8
143	45.000	.77100	1378.0	.5440-01	.6530-01	.7350-01	.9220	.3753-02	.2780-02	.6290	4.713	525.1
143	45.000	.88400	1381.0	.9340-01	.1139	.1298	.9220	.6630-02	.4771-02	.9970	7.408	542.2
143	45.000	.90700	1382.0	.7560-01	.9190-01	.1046	.9220	.5343-02	.3860-02	.8150	6.062	540.1
142	65.000	.11000	1323.0	.1775	.2182	.2379	.9320	.1214-01	.9057-02	1.822	13.27	550.3
142	67.500	.74000	1383.0	.1175	.1433	.1634	.9220	.8338-02	.5999-02	1.253	9.471	542.6
142	67.500	.75000	1384.0	.1292	.1579	.1804	.9220	.9204-02	.6594-02	1.363	10.29	544.8
143	67.500	.77100	1385.0	.5990-01	.7190-01	.8100-01	.9220	.4135-02	.3060-02	.6890	5.166	525.9
142	76.000	.10000+00	1324.0	.1825	.2247	.2452	.9320	.1251-01	.9311-02	1.859	13.75	551.8
142	76.000	.14100	1386.0	.9390-01	.1148	.1311	.9220	.6690-02	.4794-02	.9910	7.358	544.8
142	76.000	.14800	1387.0	.7510-01	.9060-01	.1024	.9220	.5228-02	.3832-02	.8410	6.283	532.0
142	76.000	.15500	1388.0	.6210-01	.7460-01	.8410-01	.9220	.4294-02	.3169-02	.7090	5.310	527.8
142	76.000	.16200	1389.0	.5340-01	.6400-01	.7210-01	.9220	.3679-02	.2724-02	.6150	4.609	525.8
142	76.000	.25000	1390.0	.3800-01	.4550-01	.5110-01	.9220	.2606-02	.1941-02	.4450	3.402	522.0
142	77.500	.95300	1436.0	.6830-01	.8250-01	.8890-01	.9327	.4534-02	.3484-02	.7600	5.677	533.3
142	77.500	.96700	1437.0	.8960-01	.1101	.1196	.9327	.6101-02	.4572-02	.9220	6.830	549.8
142	77.500	.99400	1439.0	.1217	.1523	.1668	.9327	.8511-02	.6209-02	1.161	8.535	564.5
143	90.000	.15000-01	1325.0	.1654	.2013	.2184	.9320	.1115-01	.8447-02	1.779	13.46	540.6
142	90.000	.25000-01	1326.0	.1449	.1768	.1921	.9320	.9801-02	.7393-02	1.538	11.23	543.5
143	90.000	.40000-01	1327.0	.1445	.1762	.1913	.9320	.9769-02	.7380-02	1.542	11.46	542.2
142	90.000	.60000-01	1328.0	.1873	.2296	.2499	.9320	.1275-01	.9559-02	1.950	13.55	547.5
142	90.000	.75000-01	1329.0	.1488	.1815	.1972	.9320	.1006-01	.7593-02	1.581	10.85	543.2
143	90.000	.13230	1479.0	.9370-01	.1138	.1294	.9220	.6610-02	.4784-02	1.015	7.555	539.0
143	90.000	.13390	1480.0	.9760-01	.1194	.1365	.9220	.6973-02	.4983-02	1.023	7.592	545.8
143	90.000	.13560	1481.0	.1062	.1316	.1520	.9220	.7764-02	.5425-02	1.055	7.784	556.7
143	90.000	.13730	1482.0	.1168	.1460	.1697	.9220	.8666-02	.5968-02	1.123	8.260	563.0
143	90.000	.13890	1483.0	.1049	.1321	.1545	.9220	.7890-02	.5357-02	.9780	7.172	568.6
143	90.000	.55000	1391.0	.6810-01	.8160-01	.9180-01	.9220	.4691-02	.3477-02	.7870	5.901	524.8
143	90.000	.65000	1392.0	.6210-01	.7510-01	.8500-01	.9220	.4340-02	.3173-02	.6920	5.164	533.2
142	90.000	.74000	1393.0	.2160-01	.2620-01	.2980-01	.9220	.1519-02	.1102-02	.2360	1.785	537.8
142	90.000	.76500	1394.0	.7520-01	.8990-01	.1010	.9220	.5152-02	.3836-02	.8800	6.610	522.0
142	90.000	.77100	1395.0	.5710-01	.6840-01	.7680-01	.9220	.3920-02	.2916-02	.6680	5.014	522.5
142	90.000	.81500	1396.0	.5500-01	.6640-01	.7500-01	.9220	.3830-02	.2808-02	.6170	4.690	531.8
142	90.000	.83700	1397.0	.5120-01	.6190-01	.7000-01	.9220	.3570-02	.2615-02	.5730	4.280	532.4
142	90.000	.88400	1398.0	.7280-01	.8850-01	.1006	.9220	.5133-02	.3715-02	.7880	5.865	539.4
142	90.000	.89400	1399.0	.6060-01	.7290-01	.8230-01	.9220	.4197-02	.3093-02	.6890	5.160	528.7
142	90.000	.90700	1400.0	.6790-01	.8230-01	.9350-01	.9220	.4772-02	.3463-02	.7400	5.515	537.8

IH72, RIGHT SRB W/PROTUBERANCES

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
142	90.000	.91700	1401.0	.5180-01	.6220-01	.7010-01	.9220	.3579-02	.2644-02	.5930	4.443	527.2
142	90.000	.93200	1402.0	.5720-01	.6930-01	.7850-01	.9220	.4005-02	.2921-02	.6330	4.721	534.9
142	90.000	.93900	1403.0	.6670-01	.8080-01	.9160-01	.9220	.4676-02	.3406-02	.7350	5.480	535.8
143	95.000	.13560	1484.0	.1055	.1299	.1491	.9220	.7617-02	.5390-02	1.080	7.994	550.7
143	95.000	.13890	1486.0	.1022	.1264	.1458	.9220	.7446-02	.5218-02	1.022	7.545	555.3
143	95.000	.14560	1487.0	.7630-01	.9260-01	.1051	.9220	.5370-02	.3897-02	.8320	6.203	537.5
143	95.000	.14730	1488.0	.7110-01	.8580-01	.9700-01	.9220	.4953-02	.3631-02	.7970	5.960	531.5
142	104.00	.10000+00	1330.0	.1699	.2102	.2298	.9320	.1173-01	.8671-02	1.701	12.56	555.4
142	104.00	.12000	1404.0	.8870-01	.1072	.1214	.9220	.6193-02	.4526-02	.9860	7.358	533.8
142	104.00	.12700	1405.0	.1036	.1261	.1435	.9220	.7324-02	.5288-02	1.115	8.293	540.7
142	104.00	.13400	1406.0	.1044	.1282	.1469	.9220	.7495-02	.5327-02	1.080	7.997	548.9
142	104.00	.14100	1407.0	.9940-01	.1219	.1396	.9220	.7126-02	.5074-02	1.033	7.653	548.0
142	104.00	.14800	1408.0	.7810-01	.9400-01	.1060	.9220	.5411-02	.3985-02	.8870	6.634	529.1
142	104.00	.15500	1409.0	.6450-01	.7770-01	.8780-01	.9220	.4481-02	.3291-02	.7270	5.432	530.8
142	104.00	.16200	1410.0	.5950-01	.7160-01	.8080-01	.9220	.4123-02	.3039-02	.6770	5.070	528.6
142	104.00	.17300	1411.0	.5530-01	.6640-01	.7470-01	.9220	.3814-02	.2823-02	.6370	4.771	526.0
142	104.00	.18000	1412.0	.5120-01	.6140-01	.6910-01	.9220	.3524-02	.2614-02	.5930	4.449	524.6
142	104.00	.18600	1413.0	.5050-01	.6050-01	.6800-01	.9220	.3468-02	.2577-02	.5880	4.412	523.4
142	104.00	.19300	1414.0	.5180-01	.6210-01	.6980-01	.9220	.3563-02	.2645-02	.6020	4.515	524.0
142	104.00	.20000	1415.0	.5260-01	.6310-01	.7100-01	.9220	.3622-02	.2684-02	.6080	4.557	525.1
142	104.00	.25000	1416.0	.5490-01	.6580-01	.7400-01	.9220	.3778-02	.2803-02	.6360	4.854	524.5
143	112.00	.13560	1489.0	.5680-01	.6830-01	.7710-01	.9220	.3938-02	.2899-02	.6440	4.816	529.1
143	112.00	.13730	1490.0	.6570-01	.7960-01	.9040-01	.9220	.4615-02	.3355-02	.7200	5.367	536.5
143	112.00	.13890	1491.0	.6920-01	.8420-01	.9580-01	.9220	.4894-02	.3537-02	.7470	5.558	539.9
143	112.00	.14560	1492.0	.1570-01	.1890-01	.2130-01	.9220	.1090-02	.8017-03	.1780	1.329	529.6
143	112.00	.14730	1493.0	.5100-01	.6140-01	.6940-01	.9220	.3546-02	.2602-02	.5730	4.285	530.9
142	112.50	.74000	1417.0	.9880-01	.1237	.1441	.9220	.7351-02	.5044-02	.9420	6.924	564.7
142	112.50	.75000	1418.0	.1205	.1526	.1794	.9220	.9156-02	.6149-02	1.097	8.032	573.0
143	112.50	.77100	1419.0	.6740-01	.8140-01	.9210-01	.9220	.4705-02	.3444-02	.7530	5.722	532.4
142	112.50	.92500	1420.0	.6010-01	.7250-01	.8190-01	.9220	.4181-02	.3069-02	.6760	5.054	531.2
142	112.50	.93200	1421.0	.5760-01	.7010-01	.7980-01	.9220	.4072-02	.2938-02	.6180	4.598	541.1
142	112.50	.93900	1422.0	.6390-01	.7800-01	.8890-01	.9220	.4535-02	.3262-02	.6810	5.062	542.7
142	112.50	.95300	1440.0	.9990-01	.1217	.1316	.9327	.6714-02	.5097-02	1.071	7.960	541.5
143	112.50	.96700	1441.0	.1318	.1629	.1773	.9327	.9058-02	.6734-02	1.326	9.800	554.1
143	112.50	.99400	1443.0	.1214	.1544	.1704	.9327	.8704-02	.6200-02	1.089	7.963	575.4
143	135.00	.80000-02	1331.0	.2432	.3039	.3340	.9320	.1706-01	.1242-01	2.334	18.07	563.2
142	135.00	.25000-01	1332.0	.1482	.1829	.1997	.9320	.1019-01	.7562-02	1.498	11.07	553.4
143	135.00	.50000-01	1333.0	.1932	.2398	.2625	.9320	.1341-01	.9868-02	1.909	14.08	557.6
142	135.00	.75000-01	1334.0	.1217	.1495	.1629	.9320	.8311-02	.6211-02	1.257	9.465	549.2
142	135.00	.10000+00	1335.0	.1625	.2016	.2207	.9320	.1126-01	.8290-02	1.606	11.85	557.8
142	135.00	.40000	1423.0	.5030-01	.6080-01	.6880-01	.9220	.3511-02	.2565-02	.5580	4.236	534.0
143	135.00	.92500	1424.0	.6570-01	.8110-01	.9320-01	.9220	.4762-02	.3356-02	.6660	4.925	552.7
143	140.00	.13560	1494.0	.4670-01	.5620-01	.6330-01	.9220	.3235-02	.2388-02	.5340	3.998	527.5

IH72, RIGHT SRB W/PROTUBERANCES HU/HREF (RVZR48)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
143	140.00	.13730	1495.0	.4340-01	.5230-01	.5910-01	.9220	.3018-02	.2215-02	.4870	3.644	531.0
143	140.00	.13890	1496.0	.5320-01	.6460-01	.7350-01	.9220	.3752-02	.2716-02	.5760	4.288	539.0
143	140.00	.14560	1497.0	.5870-01	.7090-01	.8040-01	.9220	.4104-02	.2997-02	.6510	4.856	534.0
143	150.00	.14230	1499.0	.5110-01	.6180-01	.6990-01	.9220	.3571-02	.2611-02	.5690	4.251	533.1
143	180.00	.80000-02	1298.0	.2717	.3442	.3808	.9320	.1945-01	.1388-01	2.477	19.09	572.7
143	180.00	.15000-01	1299.0	.1502	.1842	.2006	.9320	.1025-01	.7670-02	1.559	11.37	547.8
142	180.00	.25000-01	1300.0	.1803	.2180	.2358	.9320	.1203-01	.9198-02	1.995	14.18	534.7
143	180.00	.50000-01	1301.0	.1833	.2269	.2481	.9320	.1267-01	.9364-02	1.833	12.89	555.4
142	180.00	.75000-01	1302.0	.1243	.1526	.1663	.9320	.8485-02	.6342-02	1.283	8.911	549.2
143	180.00	.10000+00	1303.0	.1651	.2062	.2265	.9320	.1157-01	.8432-02	1.590	11.70	562.6
142	225.00	.98000	1425.0	.8820-01	.1158	.1299	.9327	.6627-02	.4502-02	.7100	5.143	593.8
142	225.00	.99400	1426.0	.2340-01	.3090-01	.3480-01	.9327	.1774-02	.1196-02	.1850	1.342	596.4
142	263.00	.13600	1336.0	.4290-01	.5130-01	.5770-01	.9220	.2942-02	.2190-02	.5020	3.770	522.3
143	263.00	.20000	1472.0	.3640-01	.4320-01	.4810-01	.9220	.2459-02	.1860-02	.4480	3.384	510.4
143	263.00	.30000	1337.0	.4480-01	.5320-01	.5930-01	.9220	.3030-02	.2290-02	.5490	4.218	511.3
143	263.00	.40000	1473.0	.4290-01	.5120-01	.5740-01	.9220	.2933-02	.2190-02	.5060	3.807	519.9
143	263.00	.50000	1474.0	.4230-01	.5030-01	.5630-01	.9220	.2873-02	.2160-02	.5100	3.840	515.2
143	263.00	.60000	1475.0	.4010-01	.4770-01	.5340-01	.9220	.2730-02	.2046-02	.4790	3.604	517.2
143	263.00	.75000	1338.0	.6000-01	.7260-01	.8230-01	.9220	.4201-02	.3063-02	.6620	4.942	534.9
143	263.00	.81500	1339.0	.3770-01	.4480-01	.5000-01	.9220	.2555-02	.1925-02	.4570	3.449	513.5
143	263.00	.83700	1340.0	.2770-01	.3300-01	.3700-01	.9220	.1891-02	.1415-02	.3300	2.479	518.3
143	263.00	.88400	1341.0	.5320-01	.6460-01	.7350-01	.9220	.3752-02	.2717-02	.5770	4.294	538.8
143	263.00	.89400	1342.0	.5240-01	.6270-01	.7040-01	.9220	.3597-02	.2678-02	.6140	4.608	522.0
143	263.00	.90700	1343.0	.3570-01	.4330-01	.4920-01	.9220	.2513-02	.1821-02	.3880	2.889	538.2
143	263.00	.92800	1477.0	.4520-01	.5410-01	.6090-01	.9220	.3111-02	.2307-02	.5230	3.926	524.3
142	263.00	.93900	1344.0	.4870-01	.5900-01	.6690-01	.9220	.3416-02	.2487-02	.5360	3.995	536.0
143	270.00	.80000-02	1304.0	.2262	.2782	.3033	.9320	.1549-01	.1155-01	2.321	18.41	550.2
143	270.00	.50000-01	1306.0	.1998	.2454	.2674	.9320	.1366-01	.1021-01	2.063	14.55	549.0
142	270.00	.75000-01	1307.0	.1461	.1786	.1941	.9320	.9905-02	.7457-02	1.542	10.90	544.8
143	270.00	.10000+00	1308.0	.1791	.2216	.2423	.9320	.1237-01	.9146-02	1.791	13.23	555.3
142	270.00	.11500	1345.0	.1309	.1632	.1892	.9220	.9657-02	.6682-02	1.272	9.362	561.2
142	277.00	.13600	1346.0	.4050-01	.4840-01	.5430-01	.9220	.2770-02	.2065-02	.4760	3.578	521.0
142	277.00	.30000	1347.0	.4490-01	.5290-01	.5880-01	.9220	.2998-02	.2290-02	.5680	4.383	503.3
143	277.00	.40000	1464.0	.4140-01	.4930-01	.5510-01	.9220	.2817-02	.2115-02	.4980	3.751	515.8
143	277.00	.60000	1466.0	.5020-01	.5940-01	.6630-01	.9220	.3385-02	.2561-02	.6170	4.659	510.4
143	277.00	.70000	1467.0	.4380-01	.5210-01	.5820-01	.9220	.2970-02	.2239-02	.5330	4.019	513.2
142	277.00	.75000	1348.0	.7720-01	.9210-01	.1032	.9220	.5268-02	.3937-02	.9140	6.871	519.4
142	277.00	.81500	1349.0	.5360-01	.6320-01	.7020-01	.9220	.3585-02	.2735-02	.6760	5.123	504.3
142	277.00	.83700	1350.0	.4860-01	.5760-01	.6420-01	.9220	.3277-02	.2478-02	.5960	4.500	511.1
142	277.00	.88400	1351.0	.6860-01	.8210-01	.9230-01	.9220	.4711-02	.3503-02	.8010	6.009	523.0
142	277.00	.89400	1352.0	.6300-01	.7480-01	.8360-01	.9220	.4265-02	.3216-02	.7670	5.787	513.0
143	277.00	.90000	1468.0	.6710-01	.7990-01	.8950-01	.9220	.4570-02	.3425-02	.8010	6.031	517.2
143	277.00	.90700	1353.0	.7280-01	.8670-01	.9710-01	.9220	.4958-02	.3717-02	.8690	6.545	517.2

IH72, RIGHT SRB W/PROTUBERANCES

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
143	277.00	.92100	1469.0	.6100-01	.7200-01	.8010-01	.9220	.4093-02	.3117-02	.7660	5.798	505.5
143	277.00	.92800	1470.0	.6680-01	.7930-01	.8850-01	.9220	.4520-02	.3412-02	.8160	6.155	512.1
143	277.00	.93700	1471.0	.6050-01	.7210-01	.8070-01	.9220	.4124-02	.3092-02	.7240	5.450	517.0
142	277.00	.93900	1354.0	.6970-01	.8310-01	.9320-01	.9220	.4754-02	.3557-02	.8280	6.231	518.7
143	335.00	.11000	1309.0	.1846	.2269	.2472	.9320	.1263-01	.9429-02	1.901	14.08	549.5
142	337.50	.74000	1355.0	.1060	.1319	.1528	.9220	.7796-02	.5408-02	1.035	7.626	560.1
142	337.50	.75000	1356.0	.8490-01	.1078	.1269	.9220	.6478-02	.4333-02	.7670	5.706	574.5
143	337.50	.76500	1357.0	.5130-01	.6150-01	.6920-01	.9220	.3533-02	.2619-02	.5940	4.527	524.5
143	337.50	.92500	1359.0	.7080-01	.8570-01	.9710-01	.9220	.4960-02	.3615-02	.7810	5.826	535.1
143	337.50	.93200	1360.0	.7570-01	.9190-01	.1045	.9220	.5338-02	.3866-02	.8210	6.116	538.7
143	337.50	.93900	1361.0	.7420-01	.9040-01	.1029	.9220	.5254-02	.3791-02	.7970	5.930	540.8

RIGHT SRB

PARAMETRIC DATA

ALPHA = -5.000 BETA = -5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
162	-5.050	-5.000	3.010	37.00	710.0	252.5	.9910	6.287	2344.	.3293-03	.2019-06	3.822
163	-5.050	-5.000	3.010	37.00	710.0	252.6	.9930	6.300	2344.	.3299-03	.2020-06	3.829

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
162	.5539-01	.9269-02
163	.5545-01	.9261-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
163	.00000	.80000-02	1310.0	.2998	.3854	.3908	.9476	.2167-01	.1663-01	2.659	20.58	550.4
162	.00000	.25000-01	1311.0	.3153	.4138	.4202	.9476	.2327-01	.1746-01	2.603	18.85	561.1
162	.00000	.83700	1364.0	.8240-01	.1044	.1135	.9350	.6285-02	.4564-02	.7700	5.722	541.6
162	.00000	.88400	1365.0	.9200-01	.1155	.1251	.9350	.6931-02	.5095-02	.8870	6.616	536.0
162	.00000	.90700	1366.0	.9200-01	.1164	.1265	.9350	.7005-02	.5097-02	.8630	6.422	540.8
162	5.0000	.75000-01	1313.0	.2041	.2630	.2659	.9481	.1473-01	.1130-01	1.793	12.83	551.6
162	5.0000	.11000	1314.0	.1325	.1665	.1682	.9481	.9314-02	.7342-02	1.278	9.532	536.0
162	15.600	.95300	1431.0	.2380	.3196	.3200	.9498	.1772-01	.1318-01	1.833	13.43	571.1
162	20.000	.75000-01	1316.0	.2269	.2945	.2957	.9493	.1638-01	.1257-01	1.942	13.88	555.6
162	20.000	.10000+00	1318.0	.2601	.3408	.3422	.9493	.1895-01	.1441-01	2.160	15.91	560.2
162	20.000	.11000	1319.0	.2665	.3484	.3499	.9493	.1938-01	.1476-01	2.229	16.42	559.2
162	20.000	.95300	1432.0	.2067	.2779	.2776	.9502	.1538-01	.1145-01	1.587	11.62	571.6
163	22.500	.72400	1367.0	.1052	.1343	.1461	.9354	.8103-02	.5831-02	.9540	7.196	546.7
162	22.500	.74000	1368.0	.1072	.1375	.1499	.9354	.8303-02	.5938-02	.9560	7.082	549.1
162	22.500	.75000	1369.0	.1059	.1356	.1476	.9354	.8177-02	.5865-02	.9510	7.048	548.0
163	22.500	.76500	1370.0	.1021	.1294	.1404	.9354	.7785-02	.5660-02	.9510	7.192	542.3
163	22.500	.77100	1371.0	.1028	.1304	.1415	.9354	.7844-02	.5700-02	.9560	7.108	542.5
162	22.500	.92500	1372.0	.1032	.1307	.1417	.9354	.7850-02	.5719-02	.9660	7.183	541.3
162	22.500	.93900	1374.0	.1033	.1327	.1447	.9354	.8016-02	.5723-02	.9170	6.793	549.9
162	24.400	.95300	1433.0	.2440	.3320	.3309	.9505	.1833-01	.1351-01	1.810	13.22	576.3

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, RIGHT SRB CLEAN,

(RVZR49)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
162	35.000	.75000-01	1321.0	.2551	.3315	.3313	.9501	.1835-01	.1413-01	2.177	15.55	556.1
162	35.000	.11000	1322.0	.2842	.3713	.3712	.9501	.2056-01	.1574-01	2.381	17.84	558.9
162	35.600	.95300	1434.0	.2338	.3211	.3188	.9509	.1766-01	.1295-01	1.691	12.33	579.6
162	40.000	.95300	1435.0	.2311	.3192	.3167	.9510	.1754-01	.1280-01	1.647	12.00	581.5
162	45.000	.74000	1375.0	.1109	.1429	.1558	.9356	.8632-02	.6143-02	.9740	7.330	551.6
162	45.000	.75000	1376.0	.1119	.1440	.1569	.9356	.8691-02	.6200-02	.9890	7.445	550.6
163	45.000	.76500	1377.0	.1096	.1400	.1521	.9356	.8433-02	.6080-02	.9970	7.393	546.4
163	45.000	.77100	1378.0	.1106	.1410	.1531	.9356	.8492-02	.6132-02	1.010	7.491	545.7
163	45.000	.88400	1381.0	.1107	.1396	.1510	.9356	.8371-02	.6137-02	1.052	7.835	538.9
163	45.000	.90700	1382.0	.1082	.1367	.1479	.9356	.8202-02	.5999-02	1.022	7.604	540.0
162	65.000	.11000	1323.0	.2829	.3701	.3709	.9496	.2054-01	.1567-01	2.362	17.12	559.4
162	67.500	.74000	1383.0	.1105	.1422	.1552	.9354	.8598-02	.6118-02	.9730	7.319	551.2
162	67.500	.75000	1384.0	.1071	.1381	.1509	.9354	.8357-02	.5932-02	.9380	7.052	552.1
163	67.500	.77100	1385.0	.1078	.1378	.1500	.9354	.8317-02	.5975-02	.9740	7.218	547.4
162	76.000	.10000+00	1324.0	.2769	.3620	.3644	.9489	.2019-01	.1534-01	2.316	17.07	559.1
162	76.000	.14100	1386.0	.6760-01	.8530-01	.9250-01	.9353	.5124-02	.3743-02	.6380	4.747	539.7
162	76.000	.14800	1387.0	.7490-01	.9490-01	.1030	.9353	.5708-02	.4147-02	.6970	5.182	542.1
162	76.000	.15500	1388.0	.8610-01	.1097	.1193	.9353	.6610-02	.4769-02	.7870	5.841	545.1
162	76.000	.16200	1389.0	.9870-01	.1262	.1375	.9353	.7615-02	.5468-02	.8910	6.610	547.1
162	76.000	.25000	1390.0	.8270-01	.1054	.1146	.9353	.6347-02	.4581-02	.7570	5.713	545.0
162	77.500	.95300	1436.0	.2415	.3257	.3266	.9496	.1809-01	.1337-01	1.836	13.44	572.9
162	77.500	.96700	1437.0	.2441	.3314	.3324	.9496	.1841-01	.1352-01	1.822	13.32	575.4
162	77.500	.99400	1439.0	.2483	.3403	.3414	.9496	.1891-01	.1375-01	1.805	13.17	578.9
163	90.000	.15000-01	1325.0	.2324	.2941	.2980	.9476	.1652-01	.1289-01	2.182	16.50	541.0
162	90.000	.25000-01	1326.0	.3167	.4168	.4232	.9476	.2344-01	.1754-01	2.596	18.79	562.2
163	90.000	.40000-01	1327.0	.2943	.3801	.3855	.9476	.2138-01	.1632-01	2.568	18.98	553.0
162	90.000	.60000-01	1328.0	.2996	.3898	.3956	.9476	.2191-01	.1659-01	2.544	17.60	556.8
162	90.000	.75000-01	1329.0	.2297	.2964	.3007	.9476	.1665-01	.1272-01	2.006	13.69	552.5
163	90.000	.13230	1479.0	.9460-01	.1190	.1289	.9350	.7148-02	.5246-02	.9100	6.783	536.9
163	90.000	.13390	1480.0	.7220-01	.9020-01	.9740-01	.9350	.5403-02	.4001-02	.7120	5.317	532.5
163	90.000	.13560	1481.0	.5950-01	.7410-01	.8000-01	.9350	.4437-02	.3300-02	.5940	4.446	530.2
163	90.000	.13730	1482.0	.5320-01	.6630-01	.7160-01	.9350	.3973-02	.2951-02	.5300	3.959	530.9
163	90.000	.13890	1483.0	.5480-01	.6840-01	.7390-01	.9350	.4097-02	.3040-02	.5440	4.066	531.4
163	90.000	.55000	1391.0	.9460-01	.1200	.1306	.9350	.7240-02	.5243-02	.8780	6.522	543.0
163	90.000	.65000	1392.0	.9010-01	.1147	.1249	.9350	.6927-02	.4995-02	.8270	6.136	544.9
162	90.000	.74000	1393.0	.1150-01	.1450-01	.1570-01	.9350	.8723-03	.6386-03	.1100	.8330	538.0
162	90.000	.76500	1394.0	.9130-01	.1172	.1280	.9350	.7090-02	.5059-02	.8150	6.036	549.1
162	90.000	.77100	1395.0	.9130-01	.1169	.1277	.9350	.7071-02	.5058-02	.8200	6.076	548.1
162	90.000	.81500	1396.0	.9020-01	.1153	.1257	.9350	.6964-02	.4994-02	.8150	6.143	547.0
162	90.000	.83700	1397.0	.8960-01	.1144	.1247	.9350	.6909-02	.4962-02	.8130	6.029	546.4
162	90.000	.88400	1398.0	.7890-01	.9980-01	.1084	.9350	.6005-02	.4371-02	.7420	5.517	540.5
162	90.000	.89400	1399.0	.7900-01	.9970-01	.1083	.9350	.5997-02	.4373-02	.7450	5.547	539.7
162	90.000	.90700	1400.0	.7810-01	.9890-01	.1076	.9350	.5959-02	.4324-02	.7270	5.406	542.0

IH72, RIGHT SRB CLEAN,

HU/HREF

(RVZR49)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
162	90.000	.91700	1401.0	.8060-01	.1023	.1113	.9350	.6162-02	.4466-02	.7490	5.565	542.5
162	90.000	.93200	1402.0	.8280-01	.1058	.1154	.9350	.6391-02	.4589-02	.7510	5.569	546.5
162	90.000	.93900	1403.0	.8630-01	.1111	.1215	.9350	.6731-02	.4783-02	.7630	5.644	550.7
163	95.000	.13560	1484.0	.5940-01	.7410-01	.8000-01	.9349	.4437-02	.3296-02	.5930	4.433	530.5
163	95.000	.13890	1486.0	.4880-01	.6090-01	.6580-01	.9349	.3648-02	.2703-02	.4830	3.607	531.8
163	95.000	.14560	1487.0	.5410-01	.6770-01	.7330-01	.9349	.4062-02	.3000-02	.5310	3.962	533.5
163	95.000	.14730	1488.0	.6260-01	.7850-01	.8500-01	.9349	.4716-02	.3470-02	.6070	4.530	535.4
162	104.00	.10000+00	1330.0	.2412	.3147	.3226	.9460	.1787-01	.1336-01	2.031	14.97	558.2
162	104.00	.12000	1404.0	.7600-01	.9580-01	.1040	.9348	.5761-02	.4210-02	.7250	5.397	538.1
162	104.00	.12700	1405.0	.1189	.1528	.1673	.9348	.9266-02	.6588-02	1.056	7.819	549.9
162	104.00	.13400	1406.0	.5650-01	.7080-01	.7680-01	.9348	.4252-02	.3127-02	.5480	4.087	535.0
162	104.00	.14100	1407.0	.5230-01	.6560-01	.7110-01	.9348	.3936-02	.2899-02	.5100	3.803	534.4
162	104.00	.14800	1408.0	.5810-01	.7320-01	.7940-01	.9348	.4400-02	.3217-02	.5540	4.129	537.9
162	104.00	.15500	1409.0	.6860-01	.8670-01	.9430-01	.9348	.5223-02	.3799-02	.6460	4.804	540.2
162	104.00	.16200	1410.0	.7820-01	.9920-01	.1080	.9348	.5985-02	.4332-02	.7270	5.403	542.4
162	104.00	.17300	1411.0	.9340-01	.1193	.1303	.9348	.7216-02	.5173-02	.8470	6.281	546.5
162	104.00	.18000	1412.0	.9340-01	.1194	.1305	.9348	.7227-02	.5174-02	.8440	6.257	547.1
162	104.00	.18600	1413.0	.9260-01	.1182	.1291	.9348	.7153-02	.5128-02	.8390	6.222	546.6
162	104.00	.19300	1414.0	.9220-01	.1179	.1288	.9348	.7132-02	.5107-02	.8330	6.179	547.0
162	104.00	.20000	1415.0	.9230-01	.1181	.1291	.9348	.7151-02	.5114-02	.8320	6.166	547.5
162	104.00	.25000	1416.0	.8930-01	.1141	.1247	.9348	.6908-02	.4945-02	.8060	6.080	547.1
163	112.00	.13560	1489.0	.4960-01	.6170-01	.6660-01	.9346	.3695-02	.2750-02	.4990	3.733	528.9
163	112.00	.13730	1490.0	.4290-01	.5330-01	.5760-01	.9346	.3196-02	.2376-02	.4300	3.218	529.3
163	112.00	.13890	1491.0	.4220-01	.5260-01	.5690-01	.9346	.3154-02	.2339-02	.4200	3.144	530.6
163	112.00	.14560	1492.0	.7900-02	.9900-02	.1070-01	.9346	.5938-03	.4394-03	.7800-01	.5860	531.8
163	112.00	.14730	1493.0	.3770-01	.4730-01	.5130-01	.9346	.2843-02	.2091-02	.3670	2.738	534.9
162	112.50	.74000	1417.0	.7570-01	.9720-01	.1065	.9346	.5898-02	.4194-02	.6740	4.992	549.5
162	112.50	.75000	1418.0	.7420-01	.9510-01	.1042	.9346	.5769-02	.4109-02	.6630	4.910	548.9
163	112.50	.77100	1419.0	.7260-01	.9200-01	.1002	.9346	.5558-02	.4024-02	.6770	5.119	542.1
162	112.50	.92500	1420.0	.7580-01	.9650-01	.1053	.9346	.5833-02	.4196-02	.6940	5.151	544.8
162	112.50	.93200	1421.0	.7800-01	.9970-01	.1090	.9346	.6040-02	.4322-02	.7060	5.232	546.9
162	112.50	.93900	1422.0	.7910-01	.1018	.1117	.9346	.6189-02	.4380-02	.6960	5.147	551.3
162	112.50	.95300	1440.0	.1859	.2515	.2594	.9457	.1437-01	.1030-01	1.401	10.25	574.1
163	112.50	.96700	1441.0	.2531	.3365	.3464	.9457	.1921-01	.1404-01	2.012	14.77	567.0
163	112.50	.99400	1443.0	.2109	.2873	.2966	.9457	.1645-01	.1169-01	1.562	11.41	576.8
163	135.00	.80000-02	1331.0	.2775	.3582	.3751	.9423	.2080-01	.1539-01	2.426	18.88	552.7
162	135.00	.25000-01	1332.0	.2389	.3129	.3286	.9423	.1820-01	.1323-01	1.989	14.65	559.9
163	135.00	.50000-01	1333.0	.2338	.3001	.3139	.9423	.1741-01	.1296-01	2.083	15.42	549.7
162	135.00	.75000-01	1334.0	.1646	.2118	.2217	.9423	.1228-01	.9119-02	1.453	10.94	550.8
162	135.00	.10000+00	1335.0	.2011	.2609	.2735	.9423	.1515-01	.1114-01	1.724	12.73	555.3
162	135.00	.40000	1423.0	.5990-01	.7680-01	.8420-01	.9345	.4666-02	.3315-02	.5330	4.013	549.5
163	135.00	.92500	1424.0	.7030-01	.8920-01	.9740-01	.9345	.5400-02	.3898-02	.6520	4.845	543.1
163	140.00	.13560	1494.0	.4040-01	.5040-01	.5450-01	.9345	.3025-02	.2240-02	.4020	3.002	531.0

IH72, RIGHT SRB CLEAN,

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
163	140.00	.13730	1495.0	.3590-01	.4480-01	.4860-01	.9345	.2693-02	.1992-02	.3560	2.658	531.7
163	140.00	.13890	1496.0	.3280-01	.4100-01	.4450-01	.9345	.2465-02	.1819-02	.3230	2.412	532.8
163	140.00	.14560	1497.0	.3720-01	.4650-01	.5050-01	.9345	.2800-02	.2061-02	.3630	2.713	534.0
163	150.00	.14230	1499.0	.3010-01	.3760-01	.4080-01	.9345	.2263-02	.1669-02	.2960	2.207	533.2
163	180.00	.80000-02	1298.0	.2746	.3583	.3855	.9384	.2138-01	.1523-01	2.316	17.97	558.3
162	180.00	.15000-01	1299.0	.1453	.1837	.1957	.9384	.1085-01	.8058-02	1.369	10.02	540.5
163	180.00	.25000-01	1300.0	.2325	.2943	.3136	.9384	.1737-01	.1288-01	2.178	15.43	541.0
162	180.00	.50000-01	1301.0	.1944	.2479	.2647	.9384	.1468-01	.1078-01	1.777	12.56	545.5
163	180.00	.75000-01	1302.0	.1152	.1483	.1589	.9384	.8801-02	.6380-02	1.015	7.039	551.1
162	180.00	.10000+00	1303.0	.1549	.2011	.2160	.9384	.1198-01	.8590-02	1.328	9.806	555.7
162	225.00	.98000	1425.0	.2215	.3161	.3536	.9376	.1958-01	.1227-01	1.456	10.56	591.5
162	225.00	.99400	1426.0	.1750	.2445	.2713	.9376	.1503-01	.9694-02	1.211	8.808	585.3
163	263.00	.13600	1336.0	.3330-01	.4210-01	.4580-01	.9345	.2538-02	.1846-02	.3150	2.344	539.6
163	263.00	.20000	1472.0	.5170-01	.6500-01	.7060-01	.9345	.3914-02	.2866-02	.4980	3.711	536.6
163	263.00	.30000	1337.0	.6090-01	.7690-01	.8370-01	.9345	.4643-02	.3378-02	.5770	4.365	539.6
163	263.00	.40000	1473.0	.5190-01	.6600-01	.7210-01	.9345	.3997-02	.2877-02	.4770	3.545	544.4
163	263.00	.50000	1474.0	.4280-01	.5430-01	.5930-01	.9345	.3288-02	.2374-02	.3980	2.955	542.9
163	263.00	.60000	1475.0	.4570-01	.5800-01	.6330-01	.9345	.3511-02	.2532-02	.4230	3.139	543.4
163	263.00	.75000	1338.0	.7030-01	.8850-01	.9620-01	.9345	.5334-02	.3896-02	.6730	5.012	537.7
163	263.00	.81500	1339.0	.6680-01	.8340-01	.9040-01	.9345	.5012-02	.3704-02	.6600	4.933	532.1
163	263.00	.83700	1340.0	.5890-01	.7360-01	.7980-01	.9345	.4427-02	.3266-02	.5790	4.327	533.0
163	263.00	.88400	1341.0	.5780-01	.7260-01	.7890-01	.9345	.4372-02	.3204-02	.5580	4.157	536.3
163	263.00	.89400	1342.0	.5680-01	.7130-01	.7750-01	.9345	.4295-02	.3147-02	.5480	4.087	536.2
163	263.00	.90700	1343.0	.7010-01	.8850-01	.9640-01	.9345	.5343-02	.3890-02	.6650	4.951	539.3
163	263.00	.92800	1477.0	.7450-01	.9450-01	.1031	.9345	.5718-02	.4133-02	.6930	5.153	542.6
162	263.00	.93900	1344.0	.1303	.1695	.1868	.9345	.1035-01	.7219-02	1.110	8.194	556.4
163	270.00	.80000-02	1304.0	.1878	.2395	.2559	.9384	.1419-01	.1041-01	1.711	13.60	546.0
163	270.00	.50000-01	1306.0	.1903	.2438	.2608	.9384	.1446-01	.1055-01	1.710	12.07	548.3
162	270.00	.75000-01	1307.0	.1229	.1591	.1708	.9384	.9459-02	.6809-02	1.063	7.481	554.0
163	270.00	.10000+00	1308.0	.1584	.2062	.2218	.9384	.1230-01	.8783-02	1.345	9.920	557.2
162	270.00	.11500	1345.0	.1052	.1396	.1554	.9345	.8609-02	.5825-02	.8380	6.153	566.3
162	277.00	.13600	1346.0	.3270-01	.4130-01	.4500-01	.9345	.2494-02	.1812-02	.3080	2.292	540.1
162	277.00	.30000	1347.0	.5970-01	.7580-01	.8280-01	.9345	.4585-02	.3307-02	.5520	4.169	543.3
163	277.00	.40000	1464.0	.5620-01	.7150-01	.7810-01	.9345	.4329-02	.3119-02	.5190	3.855	543.9
163	277.00	.60000	1466.0	.4430-01	.5620-01	.6130-01	.9345	.3398-02	.2458-02	.4140	3.074	542.1
163	277.00	.70000	1467.0	.4300-01	.5460-01	.5960-01	.9345	.3304-02	.2385-02	.3990	2.965	543.1
162	277.00	.75000	1348.0	.4910-01	.6220-01	.6780-01	.9345	.3756-02	.2718-02	.4570	3.398	541.9
162	277.00	.81500	1349.0	.5600-01	.7060-01	.7690-01	.9345	.4260-02	.3099-02	.5290	3.938	539.5
162	277.00	.83700	1350.0	.5370-01	.6800-01	.7420-01	.9345	.4107-02	.2975-02	.5020	3.732	541.5
162	277.00	.88400	1351.0	.4880-01	.6150-01	.6690-01	.9345	.3703-02	.2700-02	.4640	3.454	538.4
162	277.00	.89400	1352.0	.5250-01	.6650-01	.7250-01	.9345	.4015-02	.2911-02	.4920	3.661	541.0
163	277.00	.90000	1468.0	.5380-01	.6740-01	.7320-01	.9345	.4058-02	.2982-02	.5230	3.905	534.8
163	277.00	.90700	1353.0	.5300-01	.6640-01	.7210-01	.9345	.4000-02	.2937-02	.5140	3.836	535.2

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR49)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
163	277.00	.92100	1469.0	.5640-01	.7110-01	.7730-01	.9345	.4287-02	.3130-02	.5400	4.019	538.0
163	277.00	.92800	1470.0	.6390-01	.8060-01	.8780-01	.9345	.4867-02	.3541-02	.6050	4.501	539.6
163	277.00	.93700	1471.0	.6920-01	.8770-01	.9560-01	.9345	.5299-02	.3837-02	.6470	4.812	541.7
162	277.00	.93900	1354.0	.1177	.1531	.1688	.9345	.9350-02	.6522-02	1.003	7.402	556.4
163	335.00	.11000	1309.0	.2276	.2926	.3018	.9447	.1674-01	.1262-01	2.017	14.93	550.5
162	337.50	.74000	1355.0	.7580-01	.9650-01	.1054	.9346	.5837-02	.4199-02	.6940	5.155	544.8
162	337.50	.75000	1356.0	.7280-01	.9240-01	.1008	.9346	.5583-02	.4033-02	.6750	5.097	542.9
163	337.50	.76500	1357.0	.6880-01	.8670-01	.9420-01	.9346	.5222-02	.3816-02	.6580	4.986	537.9
163	337.50	.92500	1359.0	.7960-01	.9990-01	.1085	.9346	.6014-02	.4413-02	.7700	5.741	535.9
163	337.50	.93200	1360.0	.8380-01	.1056	.1148	.9346	.6368-02	.4646-02	.7980	5.939	538.7
163	337.50	.93900	1361.0	.9190-01	.1172	.1280	.9346	.7100-02	.5096-02	.8380	6.219	545.9

PARAMETRIC DATA

ALPHA = -5.000 BETA = .0000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
158	-5.030	.0000	3.010	37.00	710.0	252.4	.9910	6.285	2343.	.3294-03	.2019-06	3.823
159	-5.030	.0000	3.010	37.00	710.0	252.5	.9920	6.294	2344.	.3298-03	.2019-06	3.828

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
158	.5538-01	.9268-02
159	.5542-01	.9262-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
159	.00000	.80000-02	1310.0	.2919	.3849	.3907	.9477	.2165-01	.1617-01	2.376	18.27	563.1
158	.00000	.25000-01	1311.0	.3468	.4582	.4652	.9477	.2576-01	.1921-01	2.806	20.29	563.8
158	.00000	.83700	1364.0	.8560-01	.1099	.1202	.9350	.6657-02	.4738-02	.7590	5.616	549.8
158	.00000	.88400	1365.0	.9600-01	.1219	.1327	.9350	.7348-02	.5315-02	.8860	6.584	543.1
158	.00000	.90700	1366.0	.9700-01	.1246	.1363	.9350	.7547-02	.5371-02	.8590	6.362	549.9
158	5.0000	.75000-01	1313.0	.1903	.2477	.2513	.9476	.1392-01	.1054-01	1.612	11.51	556.9
158	5.0000	.11000	1314.0	.7290-01	.9090-01	.9190-01	.9476	.5091-02	.4037-02	.7250	5.418	530.4
158	15.600	.95300	1431.0	.1918	.2678	.2716	.9482	.1504-01	.1062-01	1.329	9.667	584.8
158	20.000	.75000-01	1316.0	.2010	.2637	.2682	.9473	.1485-01	.1113-01	1.662	11.85	560.6
158	20.000	.10000+00	1318.0	.2480	.3297	.3357	.9473	.1859-01	.1374-01	1.967	14.45	566.6
158	20.000	.11000	1319.0	.2549	.3374	.3435	.9473	.1902-01	.1411-01	2.047	15.04	564.8
158	20.000	.95300	1432.0	.1480	.2032	.2062	.9481	.1142-01	.8198-02	1.071	7.815	579.2
159	22.500	.72400	1367.0	.8890-01	.1159	.1275	.9349	.7067-02	.4928-02	.7520	5.641	557.4
158	22.500	.74000	1368.0	.9030-01	.1163	.1274	.9349	.7056-02	.5002-02	.7940	5.872	551.2
158	22.500	.75000	1369.0	.9540-01	.1227	.1343	.9349	.7439-02	.5281-02	.8410	6.225	550.6
159	22.500	.76500	1370.0	.8660-01	.1120	.1228	.9349	.6806-02	.4799-02	.7520	5.650	553.4
159	22.500	.77100	1371.0	.8760-01	.1134	.1244	.9349	.6893-02	.4857-02	.7600	5.616	553.6
158	22.500	.92500	1372.0	.9250-01	.1179	.1285	.9349	.7115-02	.5124-02	.8450	6.276	544.9
158	22.500	.93900	1374.0	.9400-01	.1218	.1336	.9349	.7401-02	.5208-02	.8120	5.998	554.0
158	24.400	.95300	1433.0	.1915	.2656	.2700	.9479	.1495-01	.1061-01	1.350	9.835	582.6

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR50)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
158	35.000	.75000-01	1321.0	.2071	.2716	.2775	.9466	.1537-01	.1147-01	1.715	12.22	560.4
158	35.000	.11000	1322.0	.2362	.3121	.3191	.9466	.1767-01	.1308-01	1.908	14.27	564.0
158	35.600	.95300	1434.0	.2143	.2922	.2980	.9473	.1650-01	.1187-01	1.580	11.54	576.8
158	40.000	.95300	1435.0	.2162	.2934	.2998	.9470	.1660-01	.1197-01	1.614	11.80	575.1
158	45.000	.74000	1375.0	.8940-01	.1144	.1251	.9347	.6927-02	.4948-02	.8030	6.049	547.7
158	45.000	.75000	1376.0	.8990-01	.1149	.1255	.9347	.6952-02	.4978-02	.8120	6.127	546.7
159	45.000	.76500	1377.0	.8910-01	.1146	.1255	.9347	.6957-02	.4936-02	.7870	5.827	550.5
159	45.000	.77100	1378.0	.8760-01	.1125	.1232	.9347	.6827-02	.4853-02	.7770	5.756	549.8
159	45.000	.88400	1381.0	.9190-01	.1168	.1273	.9347	.7057-02	.5093-02	.8480	6.298	543.5
159	45.000	.90700	1382.0	.9540-01	.1214	.1325	.9347	.7341-02	.5286-02	.8750	6.495	544.5
158	65.000	.11000	1323.0	.2042	.2692	.2791	.9444	.1546-01	.1131-01	1.662	12.03	562.9
158	67.500	.74000	1383.0	.8390-01	.1073	.1174	.9346	.6502-02	.4647-02	.7570	5.706	547.0
158	67.500	.75000	1384.0	.8360-01	.1072	.1174	.9346	.6500-02	.4631-02	.7480	5.638	548.3
159	67.500	.77100	1385.0	.8200-01	.1055	.1157	.9346	.6413-02	.4543-02	.7240	5.355	550.7
158	76.000	.10000+00	1324.0	.2040	.2690	.2807	.9435	.1555-01	.1129-01	1.657	12.19	563.1
158	76.000	.14100	1386.0	.4540-01	.5710-01	.6200-01	.9345	.3436-02	.2516-02	.4360	3.254	536.4
158	76.000	.14800	1387.0	.4580-01	.5770-01	.6270-01	.9345	.3472-02	.2539-02	.4390	3.272	537.0
158	76.000	.15500	1388.0	.4980-01	.6290-01	.6840-01	.9345	.3790-02	.2760-02	.4720	3.513	538.9
158	76.000	.16200	1389.0	.6000-01	.7600-01	.8280-01	.9345	.4586-02	.3320-02	.5590	4.159	541.4
158	76.000	.25000	1390.0	.6260-01	.7940-01	.8660-01	.9345	.4794-02	.3464-02	.5800	4.386	542.4
158	77.500	.95300	1436.0	.1687	.2290	.2392	.9440	.1325-01	.9342-02	1.259	9.208	575.1
158	77.500	.96700	1437.0	.1776	.2441	.2555	.9440	.1415-01	.9833-02	1.281	9.346	579.6
158	77.500	.99400	1439.0	.1805	.2517	.2642	.9440	.1463-01	.9997-02	1.255	9.130	584.4
159	90.000	.15000-01	1325.0	.1916	.2473	.2588	.9423	.1434-01	.1062-01	1.673	12.58	552.5
158	90.000	.25000-01	1326.0	.2200	.2899	.3048	.9423	.1688-01	.1219-01	1.794	12.98	562.6
159	90.000	.40000-01	1327.0	.2295	.3036	.3194	.9423	.1770-01	.1272-01	1.851	13.60	564.5
158	90.000	.60000-01	1328.0	.2239	.2937	.3085	.9423	.1708-01	.1240-01	1.851	12.78	560.6
158	90.000	.75000-01	1329.0	.1554	.2015	.2112	.9423	.1169-01	.8604-02	1.333	9.088	554.9
159	90.000	.13230	1479.0	.7550-01	.9620-01	.1051	.9345	.5826-02	.4184-02	.6900	5.122	545.1
159	90.000	.13390	1480.0	.5860-01	.7420-01	.8080-01	.9345	.4478-02	.3250-02	.5510	4.099	540.5
159	90.000	.13560	1481.0	.4620-01	.5820-01	.6330-01	.9345	.3506-02	.2560-02	.4410	3.287	537.7
159	90.000	.13730	1482.0	.4130-01	.5210-01	.5670-01	.9345	.3141-02	.2288-02	.3920	2.921	538.6
159	90.000	.13890	1483.0	.3710-01	.4670-01	.5080-01	.9345	.2816-02	.2059-02	.3560	2.653	537.1
159	90.000	.55000	1391.0	.7560-01	.9710-01	.1066	.9345	.5906-02	.4187-02	.6690	4.954	550.2
159	90.000	.65000	1392.0	.6980-01	.9000-01	.9890-01	.9345	.5483-02	.3868-02	.6110	4.519	552.1
158	90.000	.74000	1393.0	.1260-01	.1590-01	.1730-01	.9345	.9568-03	.6974-03	.1200	.9060	538.4
158	90.000	.76500	1394.0	.7450-01	.9570-01	.1049	.9345	.5807-02	.4127-02	.6640	4.915	549.1
158	90.000	.77100	1395.0	.7330-01	.9400-01	.1029	.9345	.5700-02	.4060-02	.6560	4.863	548.2
158	90.000	.81500	1396.0	.7390-01	.9470-01	.1037	.9345	.5742-02	.4094-02	.6630	4.998	547.9
158	90.000	.83700	1397.0	.7430-01	.9520-01	.1043	.9345	.5774-02	.4114-02	.6660	4.934	548.1
158	90.000	.88400	1398.0	.6180-01	.7830-01	.8530-01	.9345	.4724-02	.3422-02	.5770	4.294	541.2
158	90.000	.89400	1399.0	.6190-01	.7840-01	.8540-01	.9345	.4730-02	.3428-02	.5790	4.305	541.0
158	90.000	.90700	1400.0	.6290-01	.7990-01	.8730-01	.9345	.4832-02	.3482-02	.5800	4.306	543.4

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, RIGHT SRB CLEAN,

(RVZR50)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
158	90.000	.91700	1401.0	.6470-01	.8230-01	.8990-01	.9345	.4977-02	.3585-02	.5960	4.426	543.6
158	90.000	.93200	1402.0	.6750-01	.8620-01	.9430-01	.9345	.5224-02	.3740-02	.6120	4.542	546.2
158	90.000	.93900	1403.0	.8510-01	.1099	.1208	.9345	.6691-02	.4714-02	.7420	5.486	552.5
159	95.000	.13560	1484.0	.4780-01	.6030-01	.6560-01	.9345	.3635-02	.2649-02	.4550	3.385	538.4
159	95.000	.13890	1486.0	.3570-01	.4490-01	.4880-01	.9345	.2705-02	.1979-02	.3430	2.555	536.8
159	95.000	.14560	1487.0	.3560-01	.4480-01	.4870-01	.9345	.2701-02	.1972-02	.3400	2.530	537.8
158	104.00	.14730	1488.0	.3370-01	.4250-01	.4620-01	.9345	.2561-02	.1869-02	.3220	2.398	537.8
158	104.00	.10000+00	1330.0	.1703	.2242	.2373	.9413	.1314-01	.9430-02	1.392	10.24	562.3
158	104.00	.12000	1404.0	.6520-01	.8210-01	.8920-01	.9345	.4941-02	.3611-02	.6240	4.649	537.1
158	104.00	.12700	1405.0	.9990-01	.1283	.1407	.9345	.7790-02	.5533-02	.8880	6.577	549.4
158	104.00	.13400	1406.0	.4450-01	.5570-01	.6050-01	.9345	.3349-02	.2464-02	.4340	3.240	533.8
158	104.00	.14100	1407.0	.3810-01	.4770-01	.5170-01	.9345	.2861-02	.2112-02	.3750	2.800	532.4
158	104.00	.14800	1408.0	.3450-01	.4320-01	.4690-01	.9345	.2598-02	.1913-02	.3370	2.519	533.5
158	104.00	.15500	1409.0	.3540-01	.4430-01	.4810-01	.9345	.2662-02	.1958-02	.3440	2.568	534.1
158	104.00	.16200	1410.0	.4050-01	.5090-01	.5530-01	.9345	.3060-02	.2244-02	.3910	2.915	535.6
158	104.00	.17300	1411.0	.5400-01	.6850-01	.7470-01	.9345	.4138-02	.2991-02	.5020	3.733	542.0
158	104.00	.18000	1412.0	.6380-01	.8120-01	.8860-01	.9345	.4907-02	.3534-02	.5870	4.363	543.7
158	104.00	.18600	1413.0	.6900-01	.8780-01	.9590-01	.9345	.5311-02	.3819-02	.6320	4.693	544.4
158	104.00	.19300	1414.0	.7170-01	.9140-01	.1000+00	.9345	.5535-02	.3972-02	.6540	4.854	545.2
158	104.00	.20000	1415.0	.7250-01	.9250-01	.1012	.9345	.5604-02	.4013-02	.6570	4.876	546.1
158	104.00	.25000	1416.0	.7170-01	.9110-01	.9940-01	.9345	.5504-02	.3970-02	.6620	5.003	543.1
159	112.00	.13560	1489.0	.4000-01	.5030-01	.5460-01	.9345	.3029-02	.2215-02	.3830	2.857	537.0
159	112.00	.13730	1490.0	.3740-01	.4700-01	.5110-01	.9345	.2832-02	.2073-02	.3600	2.682	536.5
159	112.00	.13890	1491.0	.3620-01	.4540-01	.4940-01	.9345	.2737-02	.2004-02	.3480	2.596	536.3
159	112.00	.14730	1493.0	.2370-01	.2990-01	.3260-01	.9345	.1804-02	.1315-02	.2260	1.680	538.4
158	112.50	.74000	1417.0	.6020-01	.7770-01	.8540-01	.9345	.4728-02	.3333-02	.5250	3.885	552.3
158	112.50	.75000	1418.0	.6000-01	.7730-01	.8480-01	.9345	.4697-02	.3321-02	.5270	3.901	551.1
159	112.50	.77100	1419.0	.5600-01	.7230-01	.7940-01	.9345	.4403-02	.3106-02	.4900	3.688	552.1
158	112.50	.92500	1420.0	.5870-01	.7510-01	.8220-01	.9345	.4553-02	.3251-02	.5290	3.919	547.3
158	112.50	.93200	1421.0	.6660-01	.8530-01	.9350-01	.9345	.5176-02	.3690-02	.5980	4.430	547.9
158	112.50	.93900	1422.0	.9720-01	.1257	.1382	.9345	.7655-02	.5383-02	.8430	6.232	553.2
158	112.50	.95300	1440.0	.9730-01	.1339	.1433	.9412	.7938-02	.5386-02	.6990	5.096	580.1
159	112.50	.96700	1441.0	.1640	.2286	.2455	.9412	.1361-01	.9091-02	1.143	8.317	584.3
159	112.50	.99400	1443.0	.1388	.1973	.2130	.9412	.1181-01	.7693-02	.9220	6.687	590.2
159	135.00	.80000-02	1331.0	.2264	.2996	.3216	.9394	.1782-01	.1255-01	1.822	14.09	564.8
158	135.00	.25000-01	1332.0	.1564	.2048	.2191	.9394	.1213-01	.8660-02	1.300	9.581	559.7
159	135.00	.50000-01	1333.0	.1790	.2360	.2530	.9394	.1402-01	.9921-02	1.459	10.73	562.9
158	135.00	.75000-01	1334.0	.1132	.1470	.1570	.9394	.8692-02	.6266-02	.9650	7.247	555.8
158	135.00	.10000+00	1335.0	.1488	.1953	.2090	.9394	.1158-01	.8241-02	1.230	9.055	560.7
158	135.00	.40000	1423.0	.6070-01	.7850-01	.8640-01	.9345	.4783-02	.3360-02	.5250	3.947	553.6
159	135.00	.92500	1424.0	.5520-01	.7190-01	.7940-01	.9345	.4399-02	.3058-02	.4660	3.440	557.5
159	140.00	.13560	1494.0	.3870-01	.4890-01	.5320-01	.9345	.2949-02	.2145-02	.3660	2.724	539.5
159	140.00	.13730	1495.0	.3220-01	.4060-01	.4430-01	.9345	.2452-02	.1784-02	.3050	2.267	539.3

IH72, RIGHT SRB CLEAN,

(RVZR50)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
159	140.00	.13890	1496.0	.3210-01	.4050-01	.4410-01	.9345	.2445-02	.1778-02	.3030	2.255	539.6
159	140.00	.14560	1497.0	.2910-01	.3670-01	.3990-01	.9345	.2211-02	.1611-02	.2760	2.054	538.8
159	150.00	.14230	1499.0	.2930-01	.3700-01	.4030-01	.9345	.2232-02	.1624-02	.2770	2.066	539.2
159	180.00	.80000-02	1298.0	.2387	.3203	.3477	.9385	.1927-01	.1323-01	1.845	14.23	570.6
158	180.00	.15000-01	1299.0	.1252	.1614	.1729	.9385	.9583-02	.6939-02	1.099	7.997	551.6
159	180.00	.25000-01	1300.0	.1581	.2002	.2134	.9385	.1182-01	.8757-02	1.478	10.47	541.1
158	180.00	.50000-01	1301.0	.1782	.2337	.2518	.9385	.1395-01	.9873-02	1.476	10.35	560.6
159	180.00	.75000-01	1302.0	.9990-01	.1296	.1391	.9385	.7705-02	.5532-02	.8570	5.935	554.9
158	180.00	.10000+00	1303.0	.1297	.1725	.1868	.9385	.1035-01	.7189-02	1.029	7.551	566.9
158	225.00	.98000	1425.0	.6730-01	.9480-01	.1033	.9399	.5723-02	.3725-02	.4550	3.305	587.8
158	225.00	.99400	1426.0	.6040-01	.8500-01	.9260-01	.9399	.5128-02	.3343-02	.4100	2.976	587.4
158	263.00	.13600	1336.0	.4560-01	.5710-01	.6200-01	.9345	.3432-02	.2526-02	.4450	3.318	533.9
159	263.00	.20000	1472.0	.7820-01	.9940-01	.1085	.9345	.6011-02	.4335-02	.7230	5.373	543.2
159	263.00	.30000	1337.0	.7630-01	.9670-01	.1054	.9345	.5841-02	.4227-02	.7110	5.378	541.7
159	263.00	.40000	1473.0	.6650-01	.8530-01	.9340-01	.9345	.5177-02	.3686-02	.5950	4.408	548.6
159	263.00	.50000	1474.0	.6710-01	.8610-01	.9430-01	.9345	.5227-02	.3721-02	.6010	4.452	548.6
159	263.00	.60000	1475.0	.7480-01	.9590-01	.1052	.9345	.5828-02	.4143-02	.6660	4.936	549.2
159	263.00	.75000	1338.0	.7160-01	.9110-01	.9950-01	.9345	.5513-02	.3966-02	.6570	4.879	544.3
159	263.00	.81500	1339.0	.6850-01	.8680-01	.9460-01	.9345	.5245-02	.3795-02	.6390	4.748	541.7
159	263.00	.83700	1340.0	.6150-01	.7810-01	.8510-01	.9345	.4719-02	.3411-02	.5720	4.253	542.3
159	263.00	.88400	1341.0	.5920-01	.7530-01	.8220-01	.9345	.4558-02	.3281-02	.5450	4.047	544.0
159	263.00	.89400	1342.0	.5920-01	.7530-01	.8220-01	.9345	.4558-02	.3280-02	.5440	4.041	544.1
159	263.00	.90700	1343.0	.5910-01	.7570-01	.8290-01	.9345	.4596-02	.3277-02	.5310	3.935	548.0
158	263.00	.92800	1477.0	.7020-01	.9010-01	.9880-01	.9345	.5474-02	.3892-02	.6260	4.639	549.1
159	263.00	.93900	1344.0	.1087	.1402	.1541	.9345	.8533-02	.6017-02	.9490	7.017	552.2
159	270.00	.80000-02	1304.0	.2280	.2976	.3122	.9423	.1730-01	.1264-01	1.919	15.16	558.2
159	270.00	.50000-01	1306.0	.2202	.2891	.3037	.9423	.1683-01	.1221-01	1.818	12.75	561.0
158	270.00	.75000-01	1307.0	.1608	.2089	.2189	.9423	.1212-01	.8907-02	1.375	9.668	555.5
159	270.00	.10000+00	1308.0	.1877	.2486	.2616	.9423	.1450-01	.1040-01	1.508	11.08	565.1
158	270.00	.11500	1345.0	.1414	.1887	.2105	.9345	.1166-01	.7831-02	1.109	8.137	568.2
158	277.00	.13600	1346.0	.5220-01	.6550-01	.7120-01	.9345	.3941-02	.2890-02	.5030	3.755	535.6
158	277.00	.30000	1347.0	.8410-01	.1058	.1149	.9345	.6365-02	.4655-02	.8050	6.103	536.9
159	277.00	.40000	1464.0	.7700-01	.9860-01	.1081	.9345	.5988-02	.4266-02	.6900	5.112	548.3
159	277.00	.60000	1466.0	.7940-01	.1017	.1114	.9345	.6174-02	.4399-02	.7120	5.274	548.2
159	277.00	.70000	1467.0	.7190-01	.9260-01	.1016	.9345	.5630-02	.3985-02	.6340	4.695	550.8
158	277.00	.75000	1348.0	.7590-01	.9590-01	.1045	.9345	.5785-02	.4202-02	.7140	5.315	539.9
158	277.00	.81500	1349.0	.7620-01	.9570-01	.1040	.9345	.5761-02	.4217-02	.7320	5.454	536.4
158	277.00	.83700	1350.0	.7320-01	.9250-01	.1007	.9345	.5578-02	.4053-02	.6890	5.131	539.8
158	277.00	.88400	1351.0	.6710-01	.8400-01	.9120-01	.9345	.5050-02	.3713-02	.6520	4.868	534.2
158	277.00	.89400	1352.0	.6920-01	.8710-01	.9470-01	.9345	.5246-02	.3835-02	.6630	4.940	537.0
159	277.00	.90000	1468.0	.6620-01	.8430-01	.9210-01	.9345	.5106-02	.3669-02	.6060	4.501	544.8
159	277.00	.90700	1353.0	.6640-01	.8460-01	.9240-01	.9345	.5121-02	.3679-02	.6070	4.508	544.9
159	277.00	.92100	1469.0	.6850-01	.8760-01	.9580-01	.9345	.5310-02	.3799-02	.6210	4.603	546.6

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, RIGHT SRB CLEAN,

(RVZR50)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
159	277.00	.92800	1470.0	.7200-01	.9220-01	.1010	.9345	.5595-02	.3989-02	.6460	4.790	548.0
159	277.00	.93700	1471.0	.7870-01	.1012	.1111	.9345	.6156-02	.4362-02	.6960	5.152	550.5
158	277.00	.93900	1354.0	.1013	.1308	.1438	.9345	.7961-02	.5611-02	.8840	6.534	552.4
159	335.00	.11000	1309.0	.2407	.3196	.3258	.9471	.1805-01	.1334-01	1.918	14.08	566.3
158	337.50	.74000	1355.0	.1011	.1295	.1414	.9349	.7831-02	.5598-02	.9060	6.718	547.9
158	337.50	.75000	1356.0	.9800-01	.1250	.1364	.9349	.7553-02	.5425-02	.8890	6.708	546.0
159	337.50	.76500	1357.0	.9450-01	.1213	.1326	.9349	.7346-02	.5239-02	.8440	6.358	548.9
159	337.50	.92500	1359.0	.9680-01	.1244	.1360	.9349	.7538-02	.5365-02	.8600	6.365	549.8
159	337.50	.93200	1360.0	.9490-01	.1226	.1344	.9349	.7447-02	.5259-02	.8270	6.113	552.8
159	337.50	.93900	1361.0	.1072	.1399	.1541	.9349	.8539-02	.5940-02	.9020	6.650	558.2

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR51)

RIGHT SRB

PARAMETRIC DATA

ALPHA = -5.000 BETA = 5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
160	-5.060	5.000	3.010	36.90	710.0	252.5	.9900	6.281	2344.	.3291-03	.2019-06	3.820
161	-5.050	5.000	3.010	37.00	710.0	252.6	.9930	6.296	2344.	.3297-03	.2020-06	3.827

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
160	.5536-01	.9272-02
161	.5543-01	.9263-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
161	.00000	.80000-02	1310.0	.2887	.3845	.3908	.9476	.2166-01	.1600-01	2.281	17.49	567.8
160	.00000	.25000-01	1311.0	.2992	.4060	.4131	.9476	.2287-01	.1656-01	2.235	16.08	575.1
160	.00000	.83700	1364.0	.7820-01	.9980-01	.1089	.9350	.6027-02	.4330-02	.7090	5.262	546.2
160	.00000	.88400	1365.0	.8990-01	.1136	.1234	.9350	.6831-02	.4975-02	.8450	6.285	540.2
160	.00000	.90700	1366.0	.8790-01	.1122	.1223	.9350	.6773-02	.4868-02	.7980	5.923	546.0
160	5.0000	.75000-01	1313.0	.1720	.2247	.2289	.9470	.1267-01	.9522-02	1.441	10.28	558.7
160	5.0000	.11000	1314.0	.9670-01	.1212	.1230	.9470	.6811-02	.5353-02	.9410	7.020	534.3
160	15.600	.95300	1431.0	.1792	.2452	.2516	.9465	.1393-01	.9922-02	1.309	9.559	578.1
160	20.000	.75000-01	1316.0	.1725	.2270	.2340	.9453	.1296-01	.9549-02	1.411	10.05	562.3
160	20.000	.10000+00	1318.0	.2218	.2969	.3067	.9453	.1698-01	.1228-01	1.725	12.65	569.6
160	20.000	.11000	1319.0	.2262	.3019	.3118	.9453	.1726-01	.1252-01	1.771	12.99	568.5
160	20.000	.95300	1432.0	.1309	.1797	.1852	.9460	.1026-01	.7244-02	.9460	6.902	579.4
161	22.500	.72400	1367.0	.7020-01	.9010-01	.9870-01	.9346	.5470-02	.3894-02	.6270	4.725	549.2
160	22.500	.74000	1368.0	.7150-01	.9140-01	.1000+00	.9346	.5536-02	.3957-02	.6440	4.773	547.3
160	22.500	.75000	1369.0	.7400-01	.9460-01	.1034	.9346	.5723-02	.4096-02	.6690	4.959	546.8
161	22.500	.76500	1370.0	.6940-01	.8840-01	.9660-01	.9346	.5355-02	.3845-02	.6330	4.775	545.7
161	22.500	.77100	1371.0	.7090-01	.9050-01	.9880-01	.9346	.5478-02	.3931-02	.6460	4.795	545.9
160	22.500	.92500	1372.0	.7700-01	.9770-01	.1065	.9346	.5893-02	.4261-02	.7140	5.307	542.4
160	22.500	.93900	1374.0	.9200-01	.1185	.1300	.9346	.7199-02	.5092-02	.8070	5.972	551.5
160	24.400	.95300	1433.0	.1564	.2159	.2237	.9454	.1238-01	.8657-02	1.114	8.123	581.3

IH72, RIGHT SRB CLEAN,

(RVZR51)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
160	35.000	.75000-01	1321.0	.1647	.2155	.2247	.9434	.1244-01	.9116-02	1.371	9.777	559.6
160	35.000	.11000	1322.0	.1977	.2626	.2744	.9434	.1519-01	.1095-01	1.573	11.75	566.3
160	35.600	.95300	1434.0	.1514	.2100	.2202	.9440	.1219-01	.8382-02	1.066	7.766	582.8
160	40.000	.95300	1435.0	.1421	.1980	.2087	.9435	.1155-01	.7869-02	.9910	7.210	584.1
160	45.000	.74000	1375.0	.7450-01	.9570-01	.1050	.9345	.5813-02	.4123-02	.6600	4.966	550.0
160	45.000	.75000	1376.0	.7330-01	.9420-01	.1033	.9345	.5717-02	.4060-02	.6520	4.908	549.5
161	45.000	.76500	1377.0	.7140-01	.9170-01	.1006	.9345	.5578-02	.3958-02	.6340	4.695	550.1
161	45.000	.77100	1378.0	.7000-01	.8980-01	.9840-01	.9345	.5457-02	.3880-02	.6250	4.627	549.3
161	45.000	.88400	1381.0	.6960-01	.8830-01	.9630-01	.9345	.5339-02	.3856-02	.6460	4.799	542.8
161	45.000	.90700	1382.0	.6680-01	.8500-01	.9280-01	.9345	.5144-02	.3705-02	.6160	4.578	544.0
160	65.000	.11000	1323.0	.1629	.2142	.2283	.9402	.1264-01	.9016-02	1.335	9.665	561.9
160	67.500	.74000	1383.0	.4080-01	.5270-01	.5790-01	.9345	.3205-02	.2258-02	.3550	2.673	552.6
160	67.500	.75000	1384.0	.3960-01	.5130-01	.5640-01	.9345	.3124-02	.2194-02	.3430	2.577	553.8
161	67.500	.77100	1385.0	.3960-01	.5110-01	.5620-01	.9345	.3116-02	.2195-02	.3450	2.552	553.0
160	76.000	.10000+00	1324.0	.1535	.2017	.2162	.9393	.1197-01	.8496-02	1.261	9.284	561.6
160	76.000	.14100	1386.0	.3090-01	.3880-01	.4210-01	.9345	.2330-02	.1712-02	.3000	2.240	534.7
160	76.000	.14800	1387.0	.2740-01	.3430-01	.3730-01	.9345	.2063-02	.1518-02	.2670	1.994	534.0
160	76.000	.15500	1388.0	.2740-01	.3430-01	.3730-01	.9345	.2063-02	.1516-02	.2660	1.985	534.6
160	76.000	.16200	1389.0	.2890-01	.3620-01	.3930-01	.9345	.2176-02	.1598-02	.2800	2.089	534.9
160	76.000	.25000	1390.0	.4550-01	.5750-01	.6270-01	.9345	.3469-02	.2521-02	.4290	3.246	539.9
160	77.500	.95300	1436.0	.5600-01	.7770-01	.8440-01	.9397	.4671-02	.3102-02	.3950	2.880	582.5
160	77.500	.96700	1437.0	.8100-01	.1142	.1247	.9397	.6906-02	.4485-02	.5480	3.982	587.8
160	77.500	.99400	1439.0	.7760-01	.1105	.1211	.9397	.6705-02	.4297-02	.5120	3.717	590.8
161	90.000	.15000-01	1325.0	.1575	.2024	.2167	.9384	.1201-01	.8730-02	1.398	10.53	550.1
160	90.000	.25000-01	1326.0	.1529	.2005	.2161	.9384	.1196-01	.8466-02	1.267	9.179	560.4
161	90.000	.40000-01	1327.0	.1757	.2304	.2484	.9384	.1377-01	.9738-02	1.456	10.72	560.8
160	90.000	.60000-01	1328.0	.1784	.2336	.2517	.9384	.1394-01	.9877-02	1.484	10.25	559.8
160	90.000	.75000-01	1329.0	.1198	.1548	.1661	.9384	.9195-02	.6633-02	1.041	7.103	553.1
161	90.000	.13230	1479.0	.6540-01	.8260-01	.8990-01	.9345	.4984-02	.3623-02	.6170	4.594	539.9
161	90.000	.13390	1480.0	.4940-01	.6200-01	.6740-01	.9345	.3735-02	.2739-02	.4780	3.566	535.8
161	90.000	.13560	1481.0	.3850-01	.4810-01	.5220-01	.9345	.2893-02	.2135-02	.3790	2.829	532.9
161	90.000	.13730	1482.0	.2950-01	.3680-01	.3990-01	.9345	.2211-02	.1633-02	.2900	2.169	532.4
161	90.000	.13890	1483.0	.2670-01	.3340-01	.3620-01	.9345	.2006-02	.1482-02	.2640	1.973	532.1
161	90.000	.55000	1391.0	.4430-01	.5630-01	.6150-01	.9345	.3408-02	.2455-02	.4080	3.033	544.0
161	90.000	.65000	1392.0	.4980-01	.6430-01	.7080-01	.9345	.3922-02	.2759-02	.4330	3.198	553.5
160	90.000	.76500	1394.0	.4940-01	.6420-01	.7080-01	.9345	.3917-02	.2737-02	.4230	3.120	555.6
160	90.000	.77100	1395.0	.5500-01	.7130-01	.7850-01	.9345	.4348-02	.3045-02	.4730	3.491	554.8
160	90.000	.81500	1396.0	.4930-01	.6390-01	.7030-01	.9345	.3894-02	.2728-02	.4240	3.183	554.7
160	90.000	.83700	1397.0	.4690-01	.6080-01	.6690-01	.9345	.3706-02	.2595-02	.4030	2.975	554.8
160	90.000	.88400	1398.0	.3680-01	.4710-01	.5150-01	.9345	.2853-02	.2037-02	.3310	2.455	547.4
160	90.000	.89400	1399.0	.3810-01	.4880-01	.5340-01	.9345	.2957-02	.2110-02	.3430	2.539	547.7
160	90.000	.90700	1400.0	.4040-01	.5190-01	.5690-01	.9345	.3152-02	.2235-02	.3570	2.647	550.1
160	90.000	.91700	1401.0	.4180-01	.5380-01	.5900-01	.9345	.3265-02	.2314-02	.3690	2.734	550.4

IH72, RIGHT SRB CLEAN,

HU/HREF

(RVZR51)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
160	90.000	.93200	1402.0	.5210-01	.6730-01	.7400-01	.9345	.4096-02	.2885-02	.4540	3.353	552.8
160	90.000	.93900	1403.0	.8640-01	.1134	.1255	.9345	.6950-02	.4785-02	.7140	5.258	560.8
161	95.000	.13560	1484.0	.3670-01	.4600-01	.4990-01	.9345	.2766-02	.2037-02	.3590	2.683	533.8
161	95.000	.13890	1486.0	.2450-01	.3060-01	.3320-01	.9345	.1838-02	.1357-02	.2420	1.804	532.4
161	95.000	.14560	1487.0	.2460-01	.3070-01	.3330-01	.9345	.1846-02	.1363-02	.2420	1.810	532.5
161	95.000	.14730	1488.0	.2230-01	.2790-01	.3020-01	.9345	.1674-02	.1236-02	.2200	1.642	532.5
160	104.00	.10000+00	1330.0	.1317	.1729	.1873	.9378	.1037-01	.7290-02	1.085	7.989	561.2
160	104.00	.12000	1404.0	.5450-01	.6850-01	.7440-01	.9345	.4121-02	.3015-02	.5220	3.893	536.8
160	104.00	.12700	1405.0	.8250-01	.1055	.1155	.9345	.6392-02	.4565-02	.7430	5.505	547.3
160	104.00	.13400	1406.0	.3690-01	.4610-01	.5000-01	.9345	.2768-02	.2041-02	.3610	2.697	533.0
160	104.00	.14100	1407.0	.2910-01	.3630-01	.3930-01	.9345	.2177-02	.1609-02	.2870	2.145	531.7
160	104.00	.14800	1408.0	.2400-01	.3000-01	.3250-01	.9345	.1801-02	.1330-02	.2360	1.766	532.3
160	104.00	.15500	1409.0	.2260-01	.2830-01	.3070-01	.9345	.1697-02	.1254-02	.2230	1.665	532.2
160	104.00	.16200	1410.0	.2310-01	.2880-01	.3120-01	.9345	.1730-02	.1277-02	.2270	1.694	532.4
160	104.00	.17300	1411.0	.2670-01	.3360-01	.3650-01	.9345	.2018-02	.1479-02	.2580	1.920	535.9
160	104.00	.18000	1412.0	.3100-01	.3910-01	.4250-01	.9345	.2352-02	.1718-02	.2960	2.206	537.6
160	104.00	.18600	1413.0	.3660-01	.4620-01	.5030-01	.9345	.2786-02	.2028-02	.3460	2.579	539.1
160	104.00	.19300	1414.0	.4400-01	.5570-01	.6080-01	.9345	.3364-02	.2435-02	.4100	3.050	541.6
160	104.00	.20000	1415.0	.5030-01	.6400-01	.6990-01	.9345	.3868-02	.2784-02	.4620	3.430	544.1
160	104.00	.25000	1416.0	.5970-01	.7580-01	.8270-01	.9345	.4580-02	.3305-02	.5520	4.172	543.0
161	112.00	.13560	1489.0	.3680-01	.4610-01	.5000-01	.9345	.2770-02	.2043-02	.3620	2.703	533.1
161	112.00	.13730	1490.0	.3090-01	.3860-01	.4190-01	.9345	.2321-02	.1713-02	.3040	2.272	532.7
161	112.00	.13890	1491.0	.2690-01	.3370-01	.3650-01	.9345	.2024-02	.1490-02	.2630	1.964	533.8
161	112.00	.14560	1492.0	.5500-02	.6900-02	.7500-02	.9345	.4141-03	.3056-03	.5400-01	.4050	532.8
161	112.00	.14730	1493.0	.1910-01	.2390-01	.2590-01	.9345	.1438-02	.1057-02	.1860	1.385	534.7
160	112.50	.74000	1417.0	.8650-01	.1141	.1266	.9345	.7010-02	.4789-02	.7030	5.170	563.2
160	112.50	.75000	1418.0	.8540-01	.1124	.1246	.9345	.6898-02	.4729-02	.6990	5.146	562.1
161	112.50	.77100	1419.0	.8260-01	.1081	.1196	.9345	.6628-02	.4581-02	.6900	5.169	559.7
160	112.50	.92500	1420.0	.7320-01	.9500-01	.1047	.9345	.5796-02	.4052-02	.6260	4.623	555.5
160	112.50	.93200	1421.0	.8150-01	.1060	.1169	.9345	.6471-02	.4513-02	.6930	5.118	556.3
160	112.50	.93900	1422.0	.1062	.1398	.1550	.9345	.8580-02	.5878-02	.8680	6.387	562.3
160	112.50	.95300	1440.0	.1047	.1501	.1677	.9379	.9285-02	.5794-02	.6800	4.927	592.7
161	112.50	.96700	1441.0	.1588	.2295	.2572	.9379	.1426-01	.8804-02	1.016	7.352	595.0
161	112.50	.99400	1443.0	.1274	.1855	.2085	.9379	.1156-01	.7064-02	.8020	5.801	596.8
161	135.00	.80000-02	1331.0	.2127	.2802	.3049	.9372	.1690-01	.1179-01	1.738	13.46	562.9
160	135.00	.25000-01	1332.0	.1305	.1700	.1843	.9372	.1020-01	.7224-02	1.103	8.136	557.3
161	135.00	.50000-01	1333.0	.1651	.2161	.2347	.9372	.1301-01	.9152-02	1.377	10.15	559.8
160	135.00	.75000-01	1334.0	.9420-01	.1216	.1314	.9372	.7274-02	.5213-02	.8210	6.170	552.6
160	135.00	.10000+00	1335.0	.1115	.1458	.1583	.9372	.8761-02	.6173-02	.9310	6.864	559.1
160	135.00	.40000	1423.0	.6110-01	.7860-01	.8630-01	.9345	.4778-02	.3384-02	.5390	4.059	550.7
161	135.00	.92500	1424.0	.1025	.1353	.1502	.9345	.8327-02	.5684-02	.8330	6.125	563.8
161	140.00	.13560	1494.0	.3610-01	.4520-01	.4910-01	.9345	.2719-02	.1998-02	.3510	2.618	534.8
161	140.00	.13730	1495.0	.2940-01	.3690-01	.4000-01	.9345	.2218-02	.1630-02	.2860	2.135	534.8

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, RIGHT SRB CLEAN,

(RVZR51)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
161	140.00	.13890	1496.0	.2730-01	.3420-01	.3720-01	.9345	.2061-02	.1512-02	.2640	1.970	535.6
161	140.00	.14560	1497.0	.2430-01	.3040-01	.3300-01	.9345	.1831-02	.1345-02	.2360	1.758	535.1
161	150.00	.14230	1499.0	.2500-01	.3140-01	.3410-01	.9345	.1888-02	.1387-02	.2430	1.814	535.0
161	180.00	.80000-02	1298.0	.2515	.3369	.3657	.9384	.2027-01	.1394-01	1.953	15.06	570.3
160	180.00	.15000-01	1299.0	.1345	.1721	.1840	.9384	.1020-01	.7454-02	1.211	8.826	547.9
161	180.00	.25000-01	1300.0	.1836	.2331	.2487	.9384	.1377-01	.1017-01	1.699	12.03	542.8
160	180.00	.50000-01	1301.0	.1687	.2194	.2358	.9384	.1307-01	.9353-02	1.438	10.11	556.6
161	180.00	.75000-01	1302.0	.1041	.1343	.1440	.9384	.7974-02	.5762-02	.9090	6.300	552.3
160	180.00	.10000+00	1303.0	.1338	.1763	.1903	.9384	.1055-01	.7419-02	1.093	8.041	563.0
160	225.00	.98000	1425.0	.1359	.1944	.2071	.9429	.1146-01	.7522-02	.8870	6.433	592.1
160	225.00	.99400	1426.0	.1284	.1832	.1950	.9429	.1080-01	.7106-02	.8430	6.116	591.4
161	263.00	.13600	1336.0	.6190-01	.7800-01	.8460-01	.9349	.4686-02	.3429-02	.5910	4.400	537.8
161	263.00	.20000	1472.0	.9970-01	.1274	.1391	.9349	.7708-02	.5526-02	.9030	6.695	546.9
161	263.00	.30000	1337.0	.9440-01	.1199	.1305	.9349	.7233-02	.5233-02	.8750	6.613	543.1
161	263.00	.40000	1473.0	.8430-01	.1078	.1178	.9349	.6530-02	.4671-02	.7590	5.622	547.9
161	263.00	.50000	1474.0	.8430-01	.1075	.1172	.9349	.6497-02	.4676-02	.7710	5.724	545.3
161	263.00	.60000	1475.0	.9360-01	.1190	.1296	.9349	.7187-02	.5189-02	.8630	6.412	543.9
161	263.00	.75000	1338.0	.8490-01	.1072	.1164	.9349	.6452-02	.4707-02	.8050	5.991	539.3
161	263.00	.81500	1339.0	.8490-01	.1065	.1154	.9349	.6396-02	.4705-02	.8230	6.142	535.3
161	263.00	.83700	1340.0	.7740-01	.9740-01	.1056	.9349	.5854-02	.4291-02	.7430	5.539	537.1
161	263.00	.88400	1341.0	.7550-01	.9510-01	.1033	.9349	.5725-02	.4184-02	.7190	5.354	538.5
161	263.00	.89400	1342.0	.7680-01	.9690-01	.1053	.9349	.5836-02	.4258-02	.7280	5.420	539.3
161	263.00	.90700	1343.0	.7650-01	.9710-01	.1057	.9349	.5860-02	.4243-02	.7110	5.284	542.7
161	263.00	.92800	1477.0	.8520-01	.1086	.1185	.9349	.6568-02	.4723-02	.7770	5.769	545.7
160	263.00	.93900	1344.0	.1033	.1337	.1467	.9349	.8124-02	.5718-02	.8920	6.594	553.9
161	270.00	.80000-02	1304.0	.2654	.3496	.3551	.9476	.1968-01	.1471-01	2.170	17.10	562.9
161	270.00	.50000-01	1306.0	.2734	.3632	.3690	.9476	.2046-01	.1516-01	2.178	15.23	566.6
160	270.00	.75000-01	1307.0	.2040	.2683	.2724	.9476	.1508-01	.1129-01	1.673	11.73	561.8
161	270.00	.10000+00	1308.0	.2314	.3105	.3158	.9476	.1750-01	.1283-01	1.787	13.10	571.0
160	270.00	.11500	1345.0	.1625	.2207	.2473	.9350	.1369-01	.8994-02	1.209	8.839	575.6
160	277.00	.13600	1346.0	.7310-01	.9260-01	.1005	.9352	.5562-02	.4049-02	.6850	5.095	540.8
160	277.00	.30000	1347.0	.1063	.1356	.1477	.9352	.8175-02	.5883-02	.9660	7.292	545.8
161	277.00	.40000	1464.0	.9720-01	.1249	.1365	.9352	.7565-02	.5388-02	.8620	6.383	550.3
161	277.00	.60000	1466.0	.1096	.1402	.1528	.9352	.8471-02	.6076-02	.9900	7.338	547.4
161	277.00	.70000	1467.0	.9420-01	.1209	.1321	.9352	.7322-02	.5219-02	.8370	6.198	549.9
160	277.00	.75000	1348.0	.9740-01	.1240	.1350	.9352	.7471-02	.5389-02	.8910	6.610	544.8
160	277.00	.81500	1349.0	.9980-01	.1264	.1372	.9352	.7598-02	.5525-02	.9320	6.935	541.3
160	277.00	.83700	1350.0	.9580-01	.1217	.1323	.9352	.7326-02	.5303-02	.8840	6.570	543.3
160	277.00	.88400	1351.0	.9000-01	.1135	.1230	.9352	.6810-02	.4983-02	.8550	6.367	538.4
161	277.00	.89400	1352.0	.9060-01	.1146	.1244	.9352	.6886-02	.5014-02	.8490	6.315	540.7
161	277.00	.90000	1468.0	.9000-01	.1140	.1238	.9352	.6865-02	.4991-02	.8420	6.261	541.6
161	277.00	.90700	1353.0	.8920-01	.1130	.1228	.9352	.6805-02	.4946-02	.8340	6.198	541.7
161	277.00	.92100	1469.0	.9020-01	.1146	.1246	.9352	.6905-02	.4999-02	.8340	6.197	543.4

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR51)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
161	277.00	.92800	1470.0	.9160-01	.1167	.1271	.9352	.7047-02	.5076-02	.8360	6.202	545.7
161	277.00	.93700	1471.0	.9780-01	.1253	.1367	.9352	.7576-02	.5420-02	.8780	6.503	548.4
160	277.00	.93900	1354.0	.1126	.1464	.1607	.9352	.8895-02	.6233-02	.9590	7.078	556.2
161	335.00	.11000	1309.0	.2577	.3476	.3484	.9497	.1931-01	.1429-01	1.962	14.36	572.9
160	337.50	.74000	1355.0	.1092	.1407	.1537	.9354	.8509-02	.6044-02	.9560	7.075	551.8
160	337.50	.75000	1356.0	.1043	.1339	.1460	.9354	.8080-02	.5771-02	.9260	6.975	549.6
161	337.50	.76500	1357.0	.1029	.1319	.1437	.9354	.7967-02	.5703-02	.9200	6.933	548.9
161	337.50	.92500	1359.0	.1024	.1314	.1432	.9354	.7938-02	.5678-02	.9150	6.773	549.2
161	337.50	.93200	1360.0	.1038	.1340	.1463	.9354	.8111-02	.5756-02	.9090	6.726	552.3
161	337.50	.93900	1361.0	.1111	.1451	.1594	.9354	.8835-02	.6158-02	.9320	6.872	558.9

PARAMETRIC DATA

ALPHA = .0000 BETA = -5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
150	.0000	-5.000	3.010	37.00	710.0	252.4	.9930	6.300	2343.	.3302-03	.2018-06	3.834
151	.0000	-5.000	3.010	37.00	710.0	252.4	.9930	6.297	2343.	.3301-03	.2018-06	3.832

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
150	.5544-01	.9256-02
151	.5543-01	.9257-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
151	.00000	.80000-02	1310.0	.2445	.3442	.3671	.9423	.2035-01	.1355-01	1.661	12.62	587.2
150	.00000	.25000-01	1311.0	.2329	.3260	.3472	.9423	.1925-01	.1291-01	1.605	11.48	585.5
150	.00000	.83700	1364.0	.7570-01	.9660-01	.1056	.9345	.5855-02	.4196-02	.6880	5.105	545.8
150	.00000	.88400	1365.0	.8140-01	.1033	.1127	.9345	.6248-02	.4510-02	.7540	5.604	542.6
150	.00000	.90700	1366.0	.8120-01	.1038	.1136	.9345	.6298-02	.4501-02	.7330	5.438	546.8
150	5.0000	.75000-01	1313.0	.1193	.1583	.1662	.9427	.9213-02	.6612-02	.9520	6.768	565.8
150	5.0000	.11000	1314.0	.3940-01	.4950-01	.5140-01	.9427	.2850-02	.2186-02	.3810	2.845	535.3
150	15.600	.95300	1431.0	.1838	.2515	.2625	.9443	.1456-01	.1019-01	1.343	9.808	577.9
150	20.000	.75000-01	1316.0	.1368	.1850	.1931	.9440	.1071-01	.7585-02	1.034	7.323	573.4
150	20.000	.10000+00	1318.0	.1619	.2241	.2350	.9440	.1303-01	.8975-02	1.147	8.357	582.0
150	20.000	.11000	1319.0	.1783	.2475	.2597	.9440	.1440-01	.9884-02	1.253	9.128	582.9
151	22.500	.95300	1432.0	.7980-01	.1096	.1142	.9447	.6330-02	.4425-02	.5780	4.214	579.2
150	22.500	.72400	1367.0	.7970-01	.1047	.1159	.9346	.6426-02	.4417-02	.6560	4.912	561.1
150	22.500	.74000	1368.0	.8670-01	.1129	.1246	.9346	.6906-02	.4806-02	.7340	5.417	557.0
150	22.500	.75000	1369.0	.8530-01	.1108	.1221	.9346	.6767-02	.4729-02	.7290	5.384	555.6
151	22.500	.76500	1370.0	.7820-01	.1019	.1124	.9346	.6228-02	.4333-02	.6620	4.963	557.0
151	22.500	.77100	1371.0	.8210-01	.1070	.1181	.9346	.6545-02	.4552-02	.6940	5.120	557.2
150	22.500	.92500	1372.0	.8080-01	.1041	.1142	.9346	.6333-02	.4479-02	.7100	5.257	551.1
150	22.500	.93900	1374.0	.8520-01	.1113	.1228	.9346	.6811-02	.4725-02	.7170	5.284	558.1
150	24.400	.95300	1433.0	.1823	.2549	.2654	.9450	.1471-01	.1011-01	1.260	9.166	585.1

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR52)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
150	35.000	.75000-01	1321.0	.1460	.1993	.2066	.9452	.1145-01	.8092-02	1.073	7.584	577.2
150	35.000	.11000	1322.0	.1832	.2567	.2670	.9452	.1481-01	.1016-01	1.259	9.314	585.8
150	35.600	.95300	1434.0	.1618	.2317	.2401	.9460	.1331-01	.8970-02	1.055	7.647	592.2
150	40.000	.95300	1435.0	.1528	.2220	.2297	.9463	.1273-01	.8470-02	.9640	6.978	595.9
150	45.000	.74000	1375.0	.8370-01	.1109	.1232	.9347	.6831-02	.4639-02	.6700	5.004	565.4
150	45.000	.75000	1376.0	.8420-01	.1114	.1236	.9347	.6852-02	.4668-02	.6780	5.071	564.4
151	45.000	.76500	1377.0	.8130-01	.1084	.1206	.9347	.6684-02	.4508-02	.6410	4.707	567.4
151	45.000	.77100	1378.0	.7880-01	.1047	.1164	.9347	.6451-02	.4367-02	.6260	4.597	566.3
151	45.000	.88400	1381.0	.8720-01	.1145	.1267	.9347	.7021-02	.4833-02	.7180	5.290	561.0
151	45.000	.90700	1382.0	.8610-01	.1134	.1255	.9347	.6959-02	.4775-02	.7050	5.186	562.1
150	65.000	.11000	1323.0	.1922	.2724	.2792	.9470	.1548-01	.1066-01	1.285	9.176	589.2
150	67.500	.74000	1383.0	.8780-01	.1183	.1321	.9349	.7325-02	.4866-02	.6700	4.986	572.2
150	67.500	.75000	1384.0	.8470-01	.1145	.1281	.9349	.7104-02	.4697-02	.6400	4.764	573.5
151	67.500	.77100	1385.0	.8720-01	.1183	.1326	.9349	.7352-02	.4833-02	.6510	4.763	574.9
150	76.000	.10000+00	1324.0	.1830	.2602	.2660	.9474	.1475-01	.1015-01	1.214	8.809	590.1
150	76.000	.14100	1386.0	.5960-01	.7740-01	.8500-01	.9350	.4711-02	.3303-02	.5100	3.767	555.3
150	76.000	.14800	1387.0	.6390-01	.8350-01	.9200-01	.9350	.5103-02	.3544-02	.5350	3.947	558.7
150	76.000	.15500	1388.0	.7370-01	.9700-01	.1071	.9350	.5940-02	.4085-02	.6040	4.444	561.9
150	76.000	.16200	1389.0	.8210-01	.1087	.1203	.9350	.6672-02	.4553-02	.6610	4.862	564.5
150	76.000	.25000	1390.0	.7440-01	.9690-01	.1067	.9350	.5914-02	.4124-02	.6290	4.718	557.3
150	77.500	.95300	1436.0	.1022	.1593	.1625	.9483	.9009-02	.5665-02	.5610	4.027	610.8
150	77.500	.96700	1437.0	.1174	.1889	.1930	.9483	.1070-01	.6511-02	.6110	4.377	615.9
150	77.500	.99400	1439.0	.1248	.1938	.1976	.9483	.1095-01	.6918-02	.6900	4.956	610.1
151	90.000	.15000-01	1325.0	.2242	.3143	.3206	.9476	.1777-01	.1242-01	1.537	11.36	586.0
150	90.000	.25000-01	1326.0	.2495	.3708	.3796	.9476	.2105-01	.1383-01	1.501	10.66	601.2
151	90.000	.40000-01	1327.0	.2586	.3804	.3892	.9476	.2157-01	.1433-01	1.588	11.48	598.9
150	90.000	.60000-01	1328.0	.2556	.3675	.3754	.9476	.2081-01	.1417-01	1.651	11.22	593.2
150	90.000	.75000-01	1329.0	.1647	.2264	.2306	.9476	.1278-01	.9134-02	1.190	8.011	579.5
151	90.000	.13230	1479.0	.9450-01	.1251	.1385	.9350	.7679-02	.5237-02	.7600	5.584	564.6
151	90.000	.13390	1480.0	.8060-01	.1052	.1159	.9350	.6422-02	.4467-02	.6770	4.989	558.2
151	90.000	.13560	1481.0	.6660-01	.8640-01	.9490-01	.9350	.5258-02	.3694-02	.5730	4.231	554.6
151	90.000	.13730	1482.0	.6050-01	.7860-01	.8640-01	.9350	.4789-02	.3354-02	.5160	3.811	555.8
151	90.000	.13890	1483.0	.5860-01	.7630-01	.8380-01	.9350	.4647-02	.3249-02	.4980	3.676	556.4
151	90.000	.55000	1391.0	.9520-01	.1274	.1417	.9350	.7857-02	.5279-02	.7420	5.441	569.1
151	90.000	.65000	1392.0	.8650-01	.1175	.1316	.9350	.7295-02	.4795-02	.6460	4.720	575.1
150	90.000	.76500	1394.0	.8830-01	.1199	.1344	.9350	.7451-02	.4894-02	.6580	4.810	575.3
150	90.000	.77100	1395.0	.8770-01	.1188	.1330	.9350	.7373-02	.4862-02	.6590	4.817	574.3
150	90.000	.81500	1396.0	.8580-01	.1167	.1307	.9350	.7248-02	.4759-02	.6390	4.754	575.4
150	90.000	.83700	1397.0	.7670-01	.1042	.1167	.9350	.6469-02	.4255-02	.5730	4.192	575.0
150	90.000	.88400	1398.0	.6550-01	.8760-01	.9740-01	.9350	.5400-02	.3631-02	.5110	3.751	568.9
150	90.000	.89400	1399.0	.6470-01	.8650-01	.9630-01	.9350	.5337-02	.3588-02	.5050	3.703	569.0
150	90.000	.90700	1400.0	.6630-01	.8930-01	.9970-01	.9350	.5529-02	.3676-02	.5060	3.706	572.1
150	90.000	.91700	1401.0	.6590-01	.8890-01	.9940-01	.9350	.5509-02	.3652-02	.5000	3.659	572.9

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, RIGHT SRB CLEAN,

(RVZR52)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
150	90.000	.93200	1402.0	.7140-01	.9750-01	.1095	.9350	.6073-02	.3958-02	.5240	3.828	577.3
150	90.000	.93900	1403.0	.7970-01	.1112	.1262	.9350	.6997-02	.4417-02	.5530	4.021	584.6
151	95.000	.13560	1484.0	.6710-01	.8730-01	.9600-01	.9350	.5319-02	.3721-02	.5710	4.216	556.2
151	95.000	.13890	1486.0	.5720-01	.7450-01	.8180-01	.9350	.4537-02	.3172-02	.4860	3.590	556.3
151	95.000	.14560	1487.0	.5210-01	.6840-01	.7540-01	.9350	.4181-02	.2888-02	.4310	3.173	560.5
151	95.000	.14730	1488.0	.6070-01	.8000-01	.8850-01	.9350	.4904-02	.3366-02	.4950	3.643	562.6
150	104.00	.10000+00	1330.0	.1817	.2577	.2633	.9474	.1460-01	.1008-01	1.214	8.811	589.3
150	104.00	.12000	1404.0	.8990-01	.1167	.1282	.9350	.7110-02	.4986-02	.7700	5.686	555.3
150	104.00	.12700	1405.0	.1233	.1654	.1843	.9350	.1022-01	.6834-02	.9520	6.980	570.4
150	104.00	.13400	1406.0	.6590-01	.8500-01	.9310-01	.9350	.5160-02	.3655-02	.5780	4.278	551.6
150	104.00	.14100	1407.0	.5660-01	.7310-01	.8010-01	.9350	.4440-02	.3141-02	.4950	3.663	552.1
150	104.00	.14800	1408.0	.6040-01	.7890-01	.8680-01	.9350	.4815-02	.3350-02	.5080	3.746	558.1
150	104.00	.15500	1409.0	.7420-01	.9730-01	.1073	.9350	.5950-02	.4116-02	.6160	4.541	560.0
150	104.00	.16200	1410.0	.8990-01	.1182	.1304	.9350	.7233-02	.4987-02	.7410	5.458	561.1
150	104.00	.17300	1411.0	.1003	.1325	.1466	.9350	.8126-02	.5562-02	.8130	5.981	563.5
150	104.00	.18000	1412.0	.9900-01	.1307	.1447	.9350	.8021-02	.5489-02	.8020	5.900	563.6
150	104.00	.18600	1413.0	.1007	.1329	.1470	.9350	.8149-02	.5586-02	.8200	6.028	563.0
150	104.00	.19300	1414.0	.9940-01	.1313	.1453	.9350	.8059-02	.5512-02	.8050	5.919	563.7
150	104.00	.20000	1415.0	.9820-01	.1300	.1439	.9350	.7981-02	.5444-02	.7910	5.811	564.5
150	104.00	.25000	1416.0	.1026	.1355	.1500	.9350	.8316-02	.5689-02	.8310	6.216	563.7
151	112.00	.13560	1489.0	.5830-01	.7570-01	.8320-01	.9349	.4609-02	.3233-02	.5000	3.691	555.1
151	112.00	.13730	1490.0	.5040-01	.6560-01	.7210-01	.9349	.3995-02	.2796-02	.4300	3.175	555.8
151	112.00	.13890	1491.0	.5060-01	.6590-01	.7250-01	.9349	.4019-02	.2803-02	.4280	3.158	557.0
151	112.00	.14560	1492.0	.1020-01	.1280-01	.1390-01	.9349	.7707-03	.5662-03	.9900-01	.7350	535.7
151	112.00	.14730	1493.0	.5210-01	.6760-01	.7430-01	.9349	.4121-02	.2887-02	.4450	3.287	555.5
150	112.50	.74000	1417.0	.9010-01	.1221	.1368	.9349	.7583-02	.4998-02	.6770	4.953	574.3
150	112.50	.75000	1418.0	.9320-01	.1261	.1412	.9349	.7827-02	.5168-02	.7030	5.140	573.8
151	112.50	.77100	1419.0	.8350-01	.1127	.1260	.9349	.6984-02	.4628-02	.6340	4.717	572.8
150	112.50	.92500	1420.0	.6990-01	.9490-01	.1063	.9349	.5894-02	.3877-02	.5230	3.828	574.8
150	112.50	.93200	1421.0	.7490-01	.1023	.1149	.9349	.6373-02	.4153-02	.5510	4.022	577.2
150	112.50	.93900	1422.0	.8120-01	.1128	.1278	.9349	.7083-02	.4501-02	.5700	4.152	583.1
150	112.50	.95300	1440.0	.8590-01	.1360	.1393	.9479	.7724-02	.4761-02	.4590	3.290	613.4
151	112.50	.96700	1441.0	.1656	.2889	.2982	.9479	.1653-01	.9179-02	.7630	5.439	626.6
151	112.50	.99400	1443.0	.1151	.1808	.1653	.9479	.1027-01	.6382-02	.6230	4.475	612.0
151	135.00	.80000-02	1331.0	.2527	.3685	.3829	.9459	.2122-01	.1401-01	1.582	12.05	596.7
150	135.00	.25000-01	1332.0	.2246	.3245	.3368	.9459	.1867-01	.1245-01	1.435	10.39	594.5
151	135.00	.50000-01	1333.0	.2385	.3427	.3555	.9459	.1970-01	.1322-01	1.544	11.19	592.9
150	135.00	.75000-01	1334.0	.1626	.2212	.2279	.9459	.1264-01	.9016-02	1.208	8.982	575.7
150	135.00	.10000+00	1335.0	.1796	.2498	.2580	.9459	.1431-01	.9958-02	1.258	9.157	583.5
150	135.00	.40000	1423.0	.9090-01	.1196	.1323	.9347	.7334-02	.5041-02	.7470	5.591	561.6
151	135.00	.92500	1424.0	.8210-01	.1106	.1236	.9347	.6854-02	.4553-02	.6280	4.600	571.7
151	140.00	.13560	1494.0	.4620-01	.6000-01	.6610-01	.9347	.3663-02	.2561-02	.3940	2.912	555.7
151	140.00	.13730	1495.0	.4830-01	.6270-01	.6900-01	.9347	.3822-02	.2678-02	.4150	3.063	554.8

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, RIGHT SRB CLEAN, HU/HREF

(RVZR52)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
151	140.00	.13890	1496.0	.5130-01	.6660-01	.7330-01	.9347	.4063-02	.2843-02	.4390	3.241	555.3
151	140.00	.14560	1497.0	.7940-01	.1028	.1131	.9347	.6268-02	.4399-02	.6840	5.052	554.2
151	150.00	.14230	1499.0	.5900-01	.7620-01	.8360-01	.9346	.4637-02	.3269-02	.5140	3.804	552.3
151	180.00	.80000-02	1298.0	.2580	.3792	.4086	.9423	.2265-01	.1430-01	1.588	12.08	598.7
151	180.00	.15000-01	1299.0	.2079	.2812	.2973	.9423	.1648-01	.1152-01	1.569	11.29	573.6
150	180.00	.25000-01	1300.0	.2904	.3980	.4220	.9423	.2340-01	.1610-01	2.114	14.69	578.5
151	180.00	.50000-01	1301.0	.2181	.2988	.3168	.9423	.1756-01	.1209-01	1.590	11.05	578.2
150	180.00	.75000-01	1302.0	.1388	.1837	.1933	.9423	.1072-01	.7697-02	1.118	7.701	564.5
151	180.00	.10000+00	1303.0	.1541	.2141	.2277	.9423	.1262-01	.8544-02	1.083	7.884	583.0
150	225.00	.98000	1425.0	.1047	.1411	.1517	.9400	.8411-02	.5807-02	.7990	5.852	572.1
150	225.00	.99400	1426.0	.9690-01	.1318	.1421	.9400	.7876-02	.5374-02	.7210	5.268	575.6
150	263.00	.13600	1336.0	.4180-01	.5260-01	.5720-01	.9345	.3173-02	.2317-02	.4000	2.977	537.3
151	263.00	.20000	1472.0	.6430-01	.8170-01	.8920-01	.9345	.4943-02	.3566-02	.5950	4.420	542.8
151	263.00	.30000	1337.0	.6170-01	.7860-01	.8580-01	.9345	.4757-02	.3420-02	.5660	4.271	544.3
151	263.00	.40000	1473.0	.5150-01	.6640-01	.7300-01	.9345	.4048-02	.2854-02	.4500	3.327	552.1
151	263.00	.50000	1474.0	.5120-01	.6590-01	.7240-01	.9345	.4012-02	.2840-02	.4520	3.345	550.6
151	263.00	.60000	1475.0	.6230-01	.8040-01	.8830-01	.9345	.4896-02	.3453-02	.5440	4.027	552.0
151	263.00	.75000	1338.0	.7940-01	.1020	.1119	.9345	.6202-02	.4399-02	.7040	5.210	549.8
151	263.00	.81500	1339.0	.8550-01	.1098	.1204	.9345	.6671-02	.4739-02	.7610	5.636	549.1
151	263.00	.83700	1340.0	.8500-01	.1094	.1201	.9345	.6658-02	.4710-02	.7480	5.539	550.8
151	263.00	.88400	1341.0	.8320-01	.1073	.1179	.9345	.6533-02	.4611-02	.7280	5.389	551.7
151	263.00	.89400	1342.0	.8840-01	.1142	.1255	.9345	.6957-02	.4899-02	.7700	5.693	552.5
151	263.00	.90700	1343.0	.8380-01	.1089	.1200	.9345	.6654-02	.4646-02	.7150	5.282	555.7
151	263.00	.92800	1477.0	.9610-01	.1257	.1391	.9345	.7708-02	.5324-02	.8000	5.898	559.4
150	263.00	.93900	1344.0	.1041	.1378	.1531	.9345	.8491-02	.5770-02	.8370	6.152	564.7
151	270.00	.80000-02	1304.0	.2085	.2816	.3062	.9385	.1697-01	.1156-01	1.582	12.40	572.8
151	270.00	.50000-01	1306.0	.1839	.2478	.2694	.9385	.1493-01	.1019-01	1.401	9.768	572.2
150	270.00	.75000-01	1307.0	.1159	.1513	.1627	.9385	.9023-02	.6425-02	.9740	6.843	558.1
151	270.00	.10000+00	1308.0	.1349	.1821	.1981	.9385	.1098-01	.7479-02	1.024	7.495	572.8
150	270.00	.11500	1345.0	.1128	.1507	.1682	.9345	.9328-02	.6252-02	.8810	6.465	568.8
150	277.00	.13600	1346.0	.3880-01	.4900-01	.5340-01	.9345	.2958-02	.2152-02	.3670	2.731	539.2
150	277.00	.30000	1347.0	.6200-01	.7900-01	.8630-01	.9345	.4785-02	.3438-02	.5680	4.286	544.6
151	277.00	.40000	1464.0	.5020-01	.6490-01	.7140-01	.9345	.3956-02	.2781-02	.4350	3.218	553.2
151	277.00	.60000	1466.0	.6570-01	.8490-01	.9330-01	.9345	.5171-02	.3642-02	.5720	4.233	552.5
151	277.00	.70000	1467.0	.7520-01	.9800-01	.1082	.9345	.5996-02	.4166-02	.6340	4.679	557.4
150	277.00	.75000	1348.0	.8610-01	.1108	.1217	.9345	.6746-02	.4772-02	.7580	5.610	550.9
150	277.00	.81500	1349.0	.9070-01	.1168	.1283	.9345	.7113-02	.5029-02	.7980	5.903	551.1
150	277.00	.83700	1350.0	.8660-01	.1120	.1233	.9345	.6834-02	.4799-02	.7500	5.539	553.6
150	277.00	.88400	1351.0	.8630-01	.1109	.1217	.9345	.6749-02	.4783-02	.7630	5.652	550.1
150	277.00	.89400	1352.0	.8370-01	.1082	.1191	.9345	.6602-02	.4641-02	.7260	5.367	553.3
151	277.00	.90000	1468.0	.8360-01	.1088	.1201	.9345	.6656-02	.4634-02	.7090	5.233	556.7
151	277.00	.90700	1353.0	.8500-01	.1107	.1221	.9345	.6771-02	.4714-02	.7210	5.321	556.7
151	277.00	.92100	1469.0	.8870-01	.1161	.1283	.9345	.7114-02	.4918-02	.7410	5.458	559.1

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR52)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
151	277.00	.92800	1470.0	.9530-01	.1252	.1387	.9345	.7689-02	.5281-02	.7840	5.773	561.2
151	277.00	.93700	1471.0	.1005	.1330	.1477	.9345	.8189-02	.5572-02	.8110	5.960	564.2
150	277.00	.93900	1354.0	.1058	.1418	.1585	.9345	.8790-02	.5866-02	.8200	6.009	570.0
151	335.00	.11000	1309.0	.1529	.2105	.2267	.9405	.1257-01	.8477-02	1.099	8.016	580.0
150	337.50	.74000	1355.0	.6870-01	.8770-01	.9600-01	.9345	.5322-02	.3810-02	.6240	4.626	546.1
150	337.50	.75000	1356.0	.6190-01	.7880-01	.8610-01	.9345	.4776-02	.3433-02	.5670	4.284	544.5
151	337.50	.76500	1357.0	.6100-01	.7800-01	.8530-01	.9345	.4730-02	.3384-02	.5530	4.168	546.4
151	337.50	.92500	1359.0	.6130-01	.7870-01	.8630-01	.9345	.4784-02	.3399-02	.5460	4.044	549.1
151	337.50	.93200	1360.0	.7470-01	.9650-01	.1060	.9345	.5878-02	.4143-02	.6530	4.826	552.2
151	337.50	.93900	1361.0	.6840-01	.8900-01	.9820-01	.9345	.5442-02	.3789-02	.5800	4.277	556.7

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR53)

RIGHT SRB

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
146	-.2000-01	.0000	3.010	37.00	709.0	252.2	.9930	6.300	2342.	.3304-03	.2017-06	3.837
147	-.3000-01	.0000	3.010	37.00	709.0	252.2	.9910	6.288	2342.	.3298-03	.2017-06	3.830

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
146	.5544-01	.9252-02
147	.5538-01	.9261-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
147	.00000	.80000-02	1310.0	.2608	.3411	.3578	.9424	.1982-01	.1444-01	2.175	16.76	558.7
146	.00000	.25000-01	1311.0	.2398	.3151	.3308	.9424	.1834-01	.1329-01	1.973	14.29	560.9
146	.00000	.83700	1364.0	.5540-01	.7170-01	.7890-01	.9345	.4372-02	.3069-02	.4780	3.536	553.4
146	.00000	.88400	1365.0	.6600-01	.8430-01	.9230-01	.9345	.5115-02	.3657-02	.5960	4.422	546.3
146	.00000	.90700	1366.0	.5970-01	.7720-01	.8500-01	.9345	.4712-02	.3309-02	.5160	3.814	553.3
146	5.0000	.75000-01	1313.0	.1411	.1819	.1903	.9424	.1055-01	.7820-02	1.234	8.836	551.5
146	5.0000	.11000	1314.0	.7980-01	.9990-01	.1039	.9424	.5759-02	.4424-02	.7790	5.818	533.2
146	15.600	.95300	1431.0	.8640-01	.1220	.1294	.9430	.7175-02	.4789-02	.5820	4.226	587.8
146	20.000	.75000-01	1316.0	.1577	.2047	.2144	.9424	.1189-01	.8745-02	1.352	9.661	554.7
146	20.000	.10000+00	1318.0	.1903	.2508	.2635	.9424	.1461-01	.1055-01	1.550	11.41	562.3
146	20.000	.11000	1319.0	.1973	.2596	.2727	.9424	.1512-01	.1094-01	1.616	11.89	561.5
146	20.000	.95300	1432.0	.1005	.1411	.1495	.9430	.8289-02	.5569-02	.6860	4.985	586.2
147	22.500	.72400	1367.0	.7070-01	.9150-01	.1007	.9345	.5577-02	.3914-02	.6100	4.583	553.5
146	22.500	.74000	1368.0	.6740-01	.8710-01	.9590-01	.9345	.5314-02	.3737-02	.5850	4.324	552.8
146	22.500	.75000	1369.0	.7050-01	.9110-01	.1001	.9345	.5552-02	.3906-02	.6120	4.526	552.6
147	22.500	.76500	1370.0	.6740-01	.8680-01	.9540-01	.9345	.5281-02	.3732-02	.5910	4.449	550.9
147	22.500	.77100	1371.0	.6820-01	.8780-01	.9650-01	.9345	.5342-02	.3776-02	.5980	4.428	550.9
146	22.500	.92500	1372.0	.6500-01	.8310-01	.9090-01	.9345	.5039-02	.3603-02	.5880	4.360	546.2
146	22.500	.93900	1374.0	.8390-01	.1088	.1198	.9345	.6642-02	.4653-02	.7220	5.334	554.1
146	24.400	.95300	1433.0	.1130	.1575	.1667	.9430	.9240-02	.6264-02	.7860	5.720	583.8

IH72, RIGHT SRB CLEAN,

(RVZR53)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
146	35.000	.75000-01	1321.0	.1602	.2082	.2181	.9424	.1209-01	.8879-02	1.365	9.752	555.6
146	35.000	.11000	1322.0	.1955	.2579	.2711	.9424	.1503-01	.1084-01	1.588	11.88	562.8
146	35.600	.95300	1434.0	.1349	.1843	.1942	.9430	.1077-01	.7480-02	.9900	7.231	576.9
146	40.000	.95300	1435.0	.1448	.1969	.2072	.9430	.1149-01	.8030-02	1.077	7.878	575.1
146	45.000	.74000	1375.0	.7550-01	.9650-01	.1056	.9345	.5857-02	.4187-02	.6820	5.147	546.3
147	45.000	.75000	1376.0	.7770-01	.9920-01	.1085	.9345	.6014-02	.4307-02	.7050	5.318	545.6
147	45.000	.76500	1377.0	.7390-01	.9440-01	.1033	.9345	.5721-02	.4094-02	.6690	4.961	546.0
147	45.000	.77100	1378.0	.7230-01	.9220-01	.1009	.9345	.5588-02	.4003-02	.6560	4.868	545.4
147	45.000	.88400	1381.0	.7950-01	.9980-01	.1084	.9345	.6002-02	.4405-02	.7700	5.742	534.6
147	45.000	.90700	1382.0	.7560-01	.9500-01	.1033	.9345	.5719-02	.4185-02	.7250	5.406	536.1
146	65.000	.11000	1323.0	.1932	.2552	.2682	.9424	.1487-01	.1071-01	1.565	11.32	363.2
146	67.500	.74000	1383.0	.7400-01	.9460-01	.1035	.9345	.5739-02	.4103-02	.6690	5.045	546.3
146	67.500	.75000	1384.0	.6970-01	.8930-01	.9780-01	.9345	.5422-02	.3867-02	.6260	4.720	547.3
147	67.500	.77100	1385.0	.7080-01	.9060-01	.9920-01	.9345	.5493-02	.3920-02	.6360	4.714	547.1
146	76.000	.10000+00	1324.0	.1898	.2512	.2642	.9424	.1465-01	.1052-01	1.528	11.23	564.1
146	76.000	.14100	1386.0	.4440-01	.5580-01	.6070-01	.9345	.3365-02	.2459-02	.4240	3.160	536.8
146	76.000	.14800	1387.0	.4290-01	.5410-01	.5880-01	.9345	.3262-02	.2380-02	.4090	3.049	537.4
146	76.000	.15500	1388.0	.4600-01	.5810-01	.6330-01	.9345	.3510-02	.2550-02	.4330	3.223	539.5
146	76.000	.16200	1389.0	.5200-01	.6600-01	.7200-01	.9345	.3990-02	.2881-02	.4810	3.578	542.2
146	76.000	.25000	1390.0	.6310-01	.8020-01	.8760-01	.9345	.4855-02	.3500-02	.5830	4.404	542.8
146	77.500	.95300	1436.0	.1453	.1956	.2055	.9430	.1139-01	.8057-02	1.112	8.145	571.3
146	77.500	.96700	1437.0	.1601	.2177	.2291	.9430	.1270-01	.8878-02	1.192	8.712	575.1
146	77.500	.99400	1439.0	.1556	.2164	.2289	.9430	.1269-01	.8626-02	1.089	7.929	583.1
147	90.000	.15000-01	1325.0	.1719	.2209	.2309	.9424	.1279-01	.9521-02	1.523	11.47	549.4
146	90.000	.25000-01	1326.0	.2144	.2844	.2992	.9424	.1659-01	.1189-01	1.714	12.39	565.1
147	90.000	.40000-01	1327.0	.2339	.3094	.3253	.9424	.1802-01	.1296-01	1.884	13.85	563.9
146	90.000	.60000-01	1328.0	.2272	.3002	.3155	.9424	.1749-01	.1260-01	1.839	12.68	563.3
146	90.000	.75000-01	1329.0	.1511	.1968	.2063	.9424	.1144-01	.8377-02	1.278	8.708	556.7
147	90.000	.13230	1479.0	.7820-01	.9960-01	.1089	.9345	.6031-02	.4330-02	.7130	5.297	544.5
147	90.000	.13390	1480.0	.6420-01	.8110-01	.8830-01	.9345	.4890-02	.3553-02	.6040	4.494	539.4
147	90.000	.13560	1481.0	.5140-01	.6460-01	.7020-01	.9345	.3888-02	.2844-02	.4920	3.670	536.3
147	90.000	.13730	1482.0	.4540-01	.5720-01	.6220-01	.9345	.3443-02	.2517-02	.4350	3.240	536.6
147	90.000	.13890	1483.0	.4310-01	.5410-01	.5880-01	.9345	.3257-02	.2387-02	.4150	3.096	535.4
147	90.000	.55000	1391.0	.8210-01	.1044	.1140	.9345	.6316-02	.4545-02	.7530	5.594	543.6
147	90.000	.65000	1392.0	.7310-01	.9360-01	.1024	.9345	.5674-02	.4050-02	.6570	4.874	547.0
146	90.000	.74000	1393.0	.1170-01	.1470-01	.1600-01	.9345	.8852-03	.6503-03	.1140	.8640	534.2
146	90.000	.76500	1394.0	.7500-01	.9620-01	.1055	.9345	.5850-02	.4156-02	.6670	4.938	548.9
146	90.000	.77100	1395.0	.7400-01	.9490-01	.1040	.9345	.5767-02	.4104-02	.6610	4.898	548.2
146	90.000	.81500	1396.0	.7670-01	.9830-01	.1076	.9345	.5966-02	.4253-02	.6880	5.187	547.5
146	90.000	.83700	1397.0	.7540-01	.9660-01	.1058	.9345	.5865-02	.4181-02	.6760	5.013	547.5
146	90.000	.88400	1398.0	.6250-01	.7920-01	.8640-01	.9345	.4789-02	.3467-02	.5840	4.340	541.0
146	90.000	.89400	1399.0	.6200-01	.7850-01	.8560-01	.9345	.4746-02	.3435-02	.5780	4.298	541.0
146	90.000	.90700	1400.0	.6480-01	.8240-01	.9000-01	.9345	.4989-02	.3594-02	.5970	4.435	543.2

IH72, RIGHT SRB CLEAN,

HU/HREF

(RVZR53)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
146	90.000	.91700	1401.0	.6480-01	.8250-01	.9010-01	.9345	.4993-02	.3594-02	.5960	4.427	543.5
146	90.000	.93200	1402.0	.5870-01	.7510-01	.8220-01	.9345	.4558-02	.3253-02	.5280	3.913	547.0
146	90.000	.93900	1403.0	.8120-01	.1047	.1151	.9345	.6381-02	.4501-02	.7100	5.250	551.6
147	95.000	.13560	1484.0	.5440-01	.6860-01	.7460-01	.9345	.4134-02	.3012-02	.5160	3.842	538.1
147	95.000	.13890	1486.0	.4800-01	.6040-01	.6560-01	.9345	.3635-02	.2656-02	.4580	3.415	536.8
147	95.000	.14560	1487.0	.4170-01	.5260-01	.5720-01	.9345	.3166-02	.2311-02	.3980	2.962	537.3
147	95.000	.14730	1488.0	.4160-01	.5250-01	.5710-01	.9345	.3163-02	.2305-02	.3950	2.941	538.0
146	104.00	.10000+00	1330.0	.1845	.2455	.2585	.9424	.1433-01	.1023-01	1.460	10.72	566.5
146	104.00	.12000	1404.0	.7200-01	.9120-01	.9940-01	.9345	.5511-02	.3993-02	.6740	5.011	540.6
146	104.00	.12700	1405.0	.1065	.1378	.1516	.9345	.8405-02	.5902-02	.9210	6.805	553.3
146	104.00	.13400	1406.0	.5020-01	.6320-01	.6870-01	.9345	.3809-02	.2782-02	.4800	3.574	536.9
146	104.00	.14100	1407.0	.4480-01	.5630-01	.6120-01	.9345	.3393-02	.2484-02	.4310	3.211	535.9
146	104.00	.14800	1408.0	.4150-01	.5230-01	.5690-01	.9345	.3156-02	.2301-02	.3950	2.940	537.8
146	104.00	.15500	1409.0	.4920-01	.6220-01	.6780-01	.9345	.3757-02	.2727-02	.4620	3.442	539.7
146	104.00	.16200	1410.0	.5420-01	.6880-01	.7510-01	.9345	.4161-02	.3005-02	.5030	3.736	542.0
146	104.00	.17300	1411.0	.7100-01	.9090-01	.9950-01	.9345	.5516-02	.3935-02	.6380	4.728	547.2
146	104.00	.18000	1412.0	.7570-01	.9720-01	.1066	.9345	.5910-02	.4196-02	.6720	4.978	549.1
146	104.00	.18600	1413.0	.7800-01	.1002	.1099	.9345	.6094-02	.4325-02	.6920	5.128	549.2
146	104.00	.19300	1414.0	.7890-01	.1014	.1113	.9345	.6168-02	.4376-02	.7000	5.183	549.3
146	104.00	.20000	1415.0	.8050-01	.1035	.1135	.9345	.6293-02	.4460-02	.7110	5.268	549.8
146	104.00	.25000	1416.0	.7770-01	.9960-01	.1091	.9345	.6051-02	.4308-02	.6950	5.237	548.0
147	112.00	.13560	1489.0	.5020-01	.6330-01	.6890-01	.9345	.3817-02	.2782-02	.4770	3.551	538.0
147	112.00	.13730	1490.0	.4730-01	.5970-01	.6500-01	.9345	.3599-02	.2621-02	.4480	3.339	538.3
147	112.00	.13890	1491.0	.4300-01	.5430-01	.5920-01	.9345	.3277-02	.2384-02	.4060	3.025	538.9
147	112.00	.14560	1492.0	.7800-02	.9700-02	.1050-01	.9345	.5840-03	.4322-03	.7700-01	.5780	530.5
147	112.00	.14730	1493.0	.3600-01	.4550-01	.4950-01	.9345	.2743-02	.1992-02	.3380	2.515	539.6
146	112.50	.74000	1417.0	.7070-01	.9200-01	.1015	.9345	.5627-02	.3922-02	.6010	4.439	556.0
146	112.50	.75000	1418.0	.7080-01	.9210-01	.1015	.9345	.5626-02	.3927-02	.6040	4.459	555.5
147	112.50	.77100	1419.0	.6910-01	.8930-01	.9810-01	.9345	.5434-02	.3827-02	.6010	4.523	552.2
146	112.50	.92500	1420.0	.6250-01	.8010-01	.8780-01	.9345	.4870-02	.3464-02	.5570	4.131	548.3
146	112.50	.93200	1421.0	.6650-01	.8550-01	.9380-01	.9345	.5202-02	.3688-02	.5890	4.360	549.6
146	112.50	.93900	1422.0	.8100-01	.1049	.1154	.9345	.6400-02	.4488-02	.6980	5.157	553.8
146	112.50	.95300	1440.0	.1188	.1640	.1732	.9430	.9603-02	.6589-02	.8480	6.186	580.5
147	112.50	.96700	1441.0	.1713	.2372	.2506	.9430	.1388-01	.9490-02	1.212	8.836	581.6
147	112.50	.99400	1443.0	.1395	.1938	.2113	.9430	.1170-01	.7728-02	.9200	6.674	590.3
147	135.00	.80000-02	1331.0	.2540	.3391	.3573	.9424	.1979-01	.1407-01	1.988	15.36	568.0
146	135.00	.25000-01	1332.0	.2112	.2846	.3005	.9424	.1666-01	.1171-01	1.611	11.80	571.7
147	135.00	.50000-01	1333.0	.2206	.2939	.3096	.9424	.1714-01	.1222-01	1.738	12.76	567.1
146	135.00	.75000-01	1334.0	.1444	.1897	.1993	.9424	.1105-01	.8005-02	1.188	8.893	560.9
146	135.00	.10000+00	1335.0	.1766	.2354	.2479	.9424	.1374-01	.9791-02	1.391	10.21	567.2
146	135.00	.40000	1423.0	.7550-01	.9870-01	.1090	.9345	.6044-02	.4186-02	.6330	4.743	558.2
147	135.00	.92500	1424.0	.6720-01	.8870-01	.9840-01	.9345	.5451-02	.3724-02	.5460	4.019	562.6
147	140.00	.13560	1494.0	.4880-01	.6180-01	.6740-01	.9345	.3732-02	.2700-02	.4540	3.374	541.3

IH72, RIGHT SRB CLEAN,

HU/HREF

(RVZR53)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
147	140.00	.13730	1495.0	.4460-01	.5650-01	.6160-01	.9345	.3413-02	.2469-02	.4150	3.087	541.2
147	140.00	.13890	1496.0	.4100-01	.5200-01	.5680-01	.9345	.3143-02	.2271-02	.3800	2.825	541.9
147	140.00	.14560	1497.0	.4560-01	.5790-01	.6320-01	.9345	.3499-02	.2526-02	.4220	3.138	542.2
147	150.00	.14230	1499.0	.4190-01	.5310-01	.5790-01	.9345	.3208-02	.2319-02	.3880	2.888	541.8
147	180.00	.80000-02	1298.0	.2792	.3803	.4026	.9424	.2230-01	.1547-01	2.064	15.88	575.9
147	180.00	.15000-01	1299.0	.1715	.2225	.2331	.9424	.1291-01	.9499-02	1.469	10.68	554.6
146	180.00	.25000-01	1300.0	.2798	.3648	.3825	.9424	.2120-01	.1551-01	2.362	16.59	557.0
147	180.00	.50000-01	1301.0	.2244	.2982	.3139	.9424	.1739-01	.1243-01	1.782	12.46	565.9
146	180.00	.75000-01	1302.0	.1422	.1869	.1963	.9424	.1088-01	.7881-02	1.168	8.061	561.1
147	180.00	.10000+00	1303.0	.1759	.2399	.2539	.9424	.1406-01	.9745-02	1.297	9.477	576.2
146	225.00	.98000	1425.0	.1117	.1644	.1759	.9430	.9754-02	.6193-02	.6860	4.956	598.6
146	225.00	.99400	1426.0	.9330-01	.1359	.1451	.9430	.8046-02	.5173-02	.5860	4.238	596.1
146	263.00	.13600	1336.0	.5440-01	.6850-01	.7440-01	.9345	.4126-02	.3014-02	.5200	3.873	536.9
147	263.00	.20000	1472.0	.8290-01	.1049	.1143	.9345	.6331-02	.4593-02	.7770	5.782	540.1
147	263.00	.30000	1337.0	.8580-01	.1083	.1178	.9345	.6526-02	.4751-02	.8110	6.143	538.5
147	263.00	.40000	1473.0	.7510-01	.9610-01	.1052	.9345	.5824-02	.4159-02	.6760	5.013	546.8
147	263.00	.50000	1474.0	.7370-01	.9420-01	.1030	.9345	.5705-02	.4082-02	.6670	4.946	546.0
147	263.00	.60000	1475.0	.8110-01	.1035	.1132	.9345	.6268-02	.4494-02	.7380	5.476	545.1
147	263.00	.75000	1338.0	.7840-01	.9900-01	.1078	.9345	.5971-02	.4343-02	.7400	5.508	539.0
147	263.00	.81500	1339.0	.7720-01	.9650-01	.1046	.9345	.5794-02	.4278-02	.7590	5.675	531.8
147	263.00	.83700	1340.0	.6840-01	.8610-01	.9360-01	.9345	.5186-02	.3789-02	.6540	4.873	536.8
147	263.00	.88400	1341.0	.6740-01	.8470-01	.9200-01	.9345	.5094-02	.3734-02	.6490	4.844	535.4
147	263.00	.89400	1342.0	.6780-01	.8520-01	.9260-01	.9345	.5128-02	.3753-02	.6500	4.847	536.1
147	263.00	.90700	1343.0	.6680-01	.8450-01	.9210-01	.9345	.5099-02	.3698-02	.6250	4.653	540.2
147	263.00	.92800	1477.0	.7310-01	.9280-01	.1013	.9345	.5609-02	.4050-02	.6770	5.029	542.2
146	263.00	.93900	1344.0	.9970-01	.1288	.1416	.9345	.7851-02	.5530-02	.8690	6.425	552.2
147	270.00	.80000-02	1304.0	.2375	.3106	.3258	.9424	.1805-01	.1315-01	1.981	15.65	558.7
147	270.00	.50000-01	1306.0	.2356	.3107	.3265	.9424	.1808-01	.1305-01	1.915	13.42	562.6
146	270.00	.75000-01	1307.0	.1608	.2099	.2201	.9424	.1220-01	.8915-02	1.352	9.497	557.6
147	270.00	.10000+00	1308.0	.1872	.2517	.2656	.9424	.1471-01	.1037-01	1.436	10.52	570.8
146	270.00	.11500	1345.0	.1494	.2008	.2248	.9345	.1246-01	.8282-02	1.147	8.401	570.8
146	277.00	.13600	1346.0	.5250-01	.6610-01	.7180-01	.9345	.3981-02	.2911-02	.5030	3.753	536.4
146	277.00	.30000	1347.0	.8460-01	.1070	.1166	.9345	.6462-02	.4690-02	.7950	6.014	539.8
147	277.00	.40000	1464.0	.7850-01	.1001	.1095	.9345	.6065-02	.4347-02	.7130	5.294	545.2
147	277.00	.60000	1466.0	.8360-01	.1061	.1157	.9345	.6409-02	.4630-02	.7750	5.762	541.9
147	277.00	.70000	1467.0	.7560-01	.9640-01	.1054	.9345	.5838-02	.4185-02	.6870	5.099	545.2
146	277.00	.75000	1348.0	.7680-01	.9700-01	.1057	.9345	.5857-02	.4258-02	.7250	5.395	539.1
146	277.00	.81500	1349.0	.7770-01	.9740-01	.1057	.9345	.5862-02	.4310-02	.7560	5.645	533.8
146	277.00	.83700	1350.0	.7460-01	.9420-01	.1025	.9345	.5684-02	.4137-02	.7060	5.261	538.5
146	277.00	.88400	1351.0	.6980-01	.8730-01	.9470-01	.9345	.5251-02	.3869-02	.6830	5.100	532.8
146	277.00	.89400	1352.0	.6940-01	.8720-01	.9470-01	.9345	.5248-02	.3848-02	.6700	4.997	535.2
147	277.00	.90000	1468.0	.6910-01	.8660-01	.9400-01	.9345	.5208-02	.3827-02	.6700	5.002	534.2
147	277.00	.90700	1353.0	.6940-01	.8710-01	.9450-01	.9345	.5236-02	.3846-02	.6730	5.023	534.3

IH72, RIGHT SRB CLEAN,

HU/HREF

(RVZR53)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
147	277.00	.92100	1469.0	.7560-01	.9510-01	.1033	.9345	.5723-02	.4189-02	.7260	5.413	536.0
147	277.00	.92800	1470.0	.7320-01	.9240-01	.1006	.9345	.5571-02	.4054-02	.6920	5.152	538.7
147	277.00	.93700	1471.0	.7110-01	.9020-01	.9840-01	.9345	.5448-02	.3940-02	.6610	4.915	541.5
146	277.00	.93900	1354.0	.1022	.1316	.1445	.9345	.8011-02	.5669-02	.9010	6.667	550.4
147	335.00	.11000	1309.0	.1987	.2632	.2768	.9424	.1533-01	.1101-01	1.594	11.71	564.5
146	337.50	.74000	1355.0	.7570-01	.9720-01	.1067	.9345	.5914-02	.4194-02	.6700	4.961	549.6
146	337.50	.75000	1356.0	.7190-01	.9210-01	.1009	.9345	.5596-02	.3986-02	.6440	4.853	547.8
147	337.50	.76500	1357.0	.7060-01	.8990-01	.9830-01	.9345	.5442-02	.3908-02	.6440	4.864	544.5
147	337.50	.92500	1359.0	.7640-01	.9690-01	.1057	.9345	.5854-02	.4230-02	.7080	5.266	541.8
147	337.50	.93200	1360.0	.8130-01	.1036	.1132	.9345	.6269-02	.4505-02	.7430	5.520	544.3
147	337.50	.93900	1361.0	.9690-01	.1251	.1374	.9345	.7613-02	.5369-02	.8460	6.260	551.7

PARAMETRIC DATA

ALPHA = .0000 BETA = 5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
148	.0000	5.000	3.010	37.00	709.0	252.3	.9910	6.288	2343.	.3298-03	.2017-06	3.829
149	.0000	5.000	3.010	37.00	709.0	252.3	.9920	6.290	2343.	.3298-03	.2017-06	3.830

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
148	.5539-01	.9261-02
149	.5540-01	.9260-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
149	.00000	.80000-02	1310.0	.2553	.3434	.3626	.9423	.2008-01	.1414-01	1.956	14.98	571.1
148	.00000	.25000-01	1311.0	.2380	.3216	.3400	.9423	.1883-01	.1318-01	1.797	12.94	573.0
148	.00000	.83700	1364.0	.7770-01	.9930-01	.1086	.9345	.6014-02	.4304-02	.7030	5.219	545.9
148	.00000	.88400	1365.0	.8260-01	.1047	.1142	.9345	.6323-02	.4577-02	.7700	5.725	541.2
148	.00000	.90700	1366.0	.8140-01	.1043	.1142	.9345	.6323-02	.4510-02	.7310	5.418	547.3
148	5.0000	.75000-01	1313.0	.1339	.1775	.1873	.9419	.1037-01	.7418-02	1.072	7.627	564.8
148	5.0000	.11000	1314.0	.9340-01	.1213	.1274	.9419	.7056-02	.5172-02	.7980	5.890	555.1
148	15.600	.95300	1431.0	.1179	.1578	.1672	.9417	.9261-02	.6528-02	.9140	6.702	569.3
148	20.000	.75000-01	1316.0	.1361	.1812	.1929	.9409	.1068-01	.7535-02	1.073	7.622	567.0
148	20.000	.10000+00	1318.0	.1833	.2467	.2633	.9409	.1458-01	.1015-01	1.401	10.26	571.3
148	20.000	.11000	1319.0	.1907	.2550	.2718	.9409	.1505-01	.1056-01	1.485	10.89	568.7
149	22.500	.72400	1367.0	.6490-01	.8290-01	.9070-01	.9345	.5023-02	.3594-02	.5870	4.432	546.0
148	22.500	.74000	1368.0	.6370-01	.8150-01	.8910-01	.9345	.4937-02	.3530-02	.5760	4.271	546.2
148	22.500	.75000	1369.0	.6480-01	.8270-01	.9050-01	.9345	.5012-02	.3591-02	.5890	4.369	545.4
149	22.500	.76500	1370.0	.6190-01	.7860-01	.8570-01	.9345	.4750-02	.3429-02	.5730	4.331	542.3
149	22.500	.77100	1371.0	.6200-01	.7870-01	.8590-01	.9345	.4759-02	.3434-02	.5740	4.262	542.4
148	22.500	.92500	1372.0	.5620-01	.7140-01	.7790-01	.9345	.4313-02	.3112-02	.5190	3.859	542.5
148	22.500	.93900	1374.0	.7250-01	.9340-01	.1026	.9345	.5685-02	.4015-02	.6350	4.699	551.2
148	24.400	.95300	1433.0	.8020-01	.1075	.1143	.9411	.6332-02	.4444-02	.6220	4.562	569.3
148	35.000	.75000-01	1321.0	.1362	.1801	.1926	.9400	.1067-01	.7542-02	1.096	7.800	564.0

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR54)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
148	35.000	.11000	1322.0	.1813	.2404	.2573	.9400	.1425-01	.1004-01	1.449	10.83	565.1
148	35.600	.95300	1434.0	.5170-01	.6930-01	.7410-01	.9404	.4102-02	.2861-02	.3990	2.927	569.8
148	40.000	.95300	1435.0	.5660-01	.7590-01	.8140-01	.9402	.4507-02	.3132-02	.4350	3.192	570.3
148	45.000	.74000	1375.0	.4360-01	.5570-01	.6090-01	.9345	.3372-02	.2416-02	.3960	2.990	545.4
148	45.000	.75000	1376.0	.4450-01	.5670-01	.6200-01	.9345	.3431-02	.2463-02	.4050	3.060	544.8
149	45.000	.76500	1377.0	.4140-01	.5270-01	.5760-01	.9345	.3191-02	.2293-02	.3780	2.808	544.4
149	45.000	.77100	1378.0	.4190-01	.5330-01	.5820-01	.9345	.3223-02	.2320-02	.3850	2.856	543.6
149	45.000	.88400	1381.0	.4790-01	.6050-01	.6580-01	.9345	.3645-02	.2654-02	.4530	3.376	538.6
149	45.000	.90700	1382.0	.4840-01	.6120-01	.6670-01	.9345	.3693-02	.2681-02	.4550	3.383	539.9
148	65.000	.11000	1323.0	.1537	.2024	.2179	.9388	.1207-01	.8514-02	1.255	9.085	561.9
148	67.500	.74000	1383.0	.7950-01	.1025	.1126	.9345	.6239-02	.4402-02	.6950	5.226	551.6
148	67.500	.75000	1384.0	.7460-01	.9660-01	.1064	.9345	.5891-02	.4132-02	.6430	4.831	553.8
149	67.500	.77100	1385.0	.8280-01	.1067	.1173	.9345	.6496-02	.4585-02	.7240	5.356	551.5
148	76.000	.10000+00	1324.0	.1527	.2018	.2178	.9386	.1207-01	.8459-02	1.233	9.067	563.6
148	76.000	.14100	1386.0	.3290-01	.4140-01	.4500-01	.9345	.2492-02	.1824-02	.3160	2.360	535.9
148	76.000	.14800	1387.0	.3020-01	.3780-01	.4100-01	.9345	.2273-02	.1670-02	.2920	2.182	534.3
148	76.000	.15500	1388.0	.2890-01	.3630-01	.3940-01	.9345	.2181-02	.1601-02	.2800	2.088	534.6
148	76.000	.16200	1389.0	.2990-01	.3750-01	.4080-01	.9345	.2258-02	.1654-02	.2870	2.143	535.6
148	76.000	.25000	1390.0	.4660-01	.5880-01	.6410-01	.9345	.3548-02	.2580-02	.4390	3.324	539.1
148	77.500	.95300	1436.0	.1546	.2242	.2487	.9390	.1378-01	.8565-02	.9800	7.092	595.0
148	77.500	.96700	1437.0	.1599	.2346	.2614	.9390	.1448-01	.8857-02	.9870	7.135	597.9
148	77.500	.99400	1439.0	.1550	.2246	.2492	.9390	.1380-01	.8586-02	.9830	7.119	594.8
149	90.000	.15000-01	1325.0	.1552	.1985	.2121	.9385	.1175-01	.8597-02	1.398	10.54	546.8
148	90.000	.25000-01	1326.0	.1472	.1904	.2042	.9385	.1131-01	.8151-02	1.273	9.253	553.2
149	90.000	.40000-01	1327.0	.1663	.2176	.2342	.9385	.1298-01	.9212-02	1.386	10.22	559.0
148	90.000	.60000-01	1328.0	.1766	.2333	.2520	.9385	.1396-01	.9781-02	1.427	9.836	563.5
148	90.000	.75000-01	1329.0	.1175	.1537	.1655	.9385	.9165-02	.6510-02	.9810	6.675	558.7
149	90.000	.13230	1479.0	.6260-01	.7940-01	.8670-01	.9345	.4801-02	.3467-02	.5800	4.308	542.2
149	90.000	.13390	1480.0	.4850-01	.6120-01	.6660-01	.9345	.3691-02	.2689-02	.4610	3.431	538.1
149	90.000	.13560	1481.0	.3770-01	.4720-01	.5130-01	.9345	.2841-02	.2086-02	.3650	2.721	534.6
149	90.000	.13730	1482.0	.3190-01	.4000-01	.4340-01	.9345	.2402-02	.1767-02	.3100	2.317	533.7
149	90.000	.13890	1483.0	.3220-01	.4030-01	.4370-01	.9345	.2420-02	.1784-02	.3150	2.355	532.6
149	90.000	.55000	1391.0	.5990-01	.7740-01	.8510-01	.9345	.4715-02	.3316-02	.5200	3.842	552.7
149	90.000	.65000	1392.0	.6620-01	.8650-01	.9560-01	.9345	.5294-02	.3669-02	.5550	4.095	558.1
148	90.000	.74000	1393.0	.1140-01	.1440-01	.1570-01	.9345	.8691-03	.6290-03	.1060	.8000	541.2
148	90.000	.76500	1394.0	.7750-01	.1025	.1139	.9345	.6307-02	.4293-02	.6250	4.593	563.9
148	90.000	.77100	1395.0	.8020-01	.1058	.1174	.9345	.6502-02	.4440-02	.6500	4.784	562.9
148	90.000	.81500	1396.0	.8530-01	.1126	.1250	.9345	.6922-02	.4723-02	.6910	5.166	563.1
148	90.000	.83700	1397.0	.8740-01	.1154	.1282	.9345	.7098-02	.4842-02	.7080	5.204	563.2
148	90.000	.88400	1398.0	.7560-01	.9850-01	.1087	.9345	.6021-02	.4185-02	.6370	4.703	557.0
148	90.000	.89400	1399.0	.7650-01	.9960-01	.1099	.9345	.6085-02	.4235-02	.6470	4.776	556.5
148	90.000	.90700	1400.0	.7940-01	.1039	.1148	.9345	.6360-02	.4399-02	.6630	4.887	558.6
148	90.000	.91700	1401.0	.8040-01	.1052	.1163	.9345	.6440-02	.4452-02	.6700	4.942	558.8

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, RIGHT SRB CLEAN,

(RVZR54)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
148	90.000	.93200	1402.0	.9080-01	.1192	.1319	.9345	.7308-02	.5029-02	.7490	5.519	560.4
148	90.000	.93900	1403.0	.1128	.1497	.1667	.9345	.9231-02	.6245-02	.8970	6.590	565.7
149	95.000	.13560	1484.0	.3960-01	.4970-01	.5400-01	.9345	.2994-02	.2192-02	.3800	2.836	535.9
149	95.000	.13890	1486.0	.2900-01	.3630-01	.3940-01	.9345	.2183-02	.1607-02	.2830	2.113	533.3
149	95.000	.14560	1487.0	.3140-01	.3930-01	.4260-01	.9345	.2360-02	.1741-02	.3080	2.303	532.3
149	95.000	.14730	1488.0	.2910-01	.3640-01	.3950-01	.9345	.2186-02	.1613-02	.2860	2.137	532.1
148	104.00	.10000+00	1330.0	.1459	.1926	.2078	.9386	.1151-01	.8083-02	1.183	8.699	563.0
148	104.00	.12000	1404.0	.5480-01	.6960-01	.7590-01	.9345	.4203-02	.3035-02	.5080	3.774	542.1
148	104.00	.12700	1405.0	.8390-01	.1083	.1190	.9345	.6593-02	.4644-02	.7300	5.398	552.2
148	104.00	.13400	1406.0	.4030-01	.5070-01	.5510-01	.9345	.3053-02	.2229-02	.3840	2.861	537.1
148	104.00	.14100	1407.0	.3410-01	.4280-01	.4650-01	.9345	.2576-02	.1889-02	.3300	2.459	534.9
148	104.00	.14800	1408.0	.3160-01	.3960-01	.4300-01	.9345	.2382-02	.1751-02	.3070	2.293	533.9
148	104.00	.15500	1409.0	.3000-01	.3760-01	.4090-01	.9345	.2263-02	.1663-02	.2910	2.174	534.2
148	104.00	.16200	1410.0	.3170-01	.3980-01	.4330-01	.9345	.2396-02	.1758-02	.3070	2.290	534.8
148	104.00	.17300	1411.0	.3800-01	.4810-01	.5240-01	.9345	.2902-02	.2103-02	.3550	2.640	540.6
148	104.00	.18000	1412.0	.4280-01	.5440-01	.5940-01	.9345	.3289-02	.2368-02	.3930	2.920	543.4
148	104.00	.18600	1413.0	.4830-01	.6160-01	.6740-01	.9345	.3731-02	.2676-02	.4400	3.265	545.0
148	104.00	.19300	1414.0	.5530-01	.7080-01	.7750-01	.9345	.4291-02	.3062-02	.4970	3.684	547.1
148	104.00	.20000	1415.0	.5910-01	.7590-01	.8320-01	.9345	.4608-02	.3276-02	.5270	3.901	548.6
148	104.00	.25000	1416.0	.6180-01	.7890-01	.8630-01	.9345	.4782-02	.3422-02	.5590	4.217	546.0
149	112.00	.13560	1489.0	.4100-01	.5140-01	.5580-01	.9345	.3091-02	.2270-02	.3970	2.962	534.6
149	112.00	.13730	1490.0	.3540-01	.4430-01	.4810-01	.9345	.2663-02	.1960-02	.3450	2.579	533.2
149	112.00	.13890	1491.0	.3370-01	.4210-01	.4570-01	.9345	.2531-02	.1866-02	.3300	2.463	532.7
149	112.00	.14560	1492.0	.8100-02	.1010-01	.1090-01	.9345	.6041-03	.4479-03	.8100-01	.6020	529.6
149	112.00	.14730	1493.0	.2630-01	.3290-01	.3570-01	.9345	.1978-02	.1455-02	.2560	1.910	533.6
148	112.50	.74000	1417.0	.6450-01	.8350-01	.9200-01	.9345	.5093-02	.3571-02	.5550	4.103	553.9
148	112.50	.75000	1418.0	.6850-01	.8870-01	.9770-01	.9345	.5410-02	.3794-02	.5900	4.359	553.9
149	112.50	.77100	1419.0	.6910-01	.8880-01	.9750-01	.9345	.5402-02	.3825-02	.6090	4.584	550.2
148	112.50	.92500	1420.0	.8620-01	.1125	.1243	.9345	.6882-02	.4775-02	.7250	5.344	557.6
148	112.50	.93200	1421.0	.9090-01	.1188	.1313	.9345	.7269-02	.5033-02	.7600	5.604	558.3
148	112.50	.93900	1422.0	.1138	.1500	.1664	.9345	.9218-02	.6302-02	.9260	6.809	562.5
148	112.50	.95300	1440.0	.1568	.2299	.2556	.9392	.1416-01	.8686-02	.9690	7.009	597.7
149	112.50	.96700	1441.0	.2751	.4033	.4484	.9392	.2484-01	.1524-01	1.701	12.30	597.8
149	112.50	.99400	1443.0	.2028	.2894	.3188	.9392	.1766-01	.1123-01	1.332	9.659	590.9
149	135.00	.80000-02	1331.0	.2444	.3252	.3495	.9395	.1936-01	.1354-01	1.934	14.95	566.6
148	135.00	.25000-01	1332.0	.1807	.2399	.2577	.9395	.1427-01	.1001-01	1.439	10.57	565.6
149	135.00	.50000-01	1333.0	.1882	.2476	.2652	.9395	.1469-01	.1042-01	1.541	11.34	561.6
148	135.00	.75000-01	1334.0	.1236	.1625	.1740	.9395	.9638-02	.6846-02	1.015	7.596	561.1
148	135.00	.10000+00	1335.0	.1557	.2060	.2210	.9395	.1224-01	.8626-02	1.254	9.223	563.9
148	135.00	.40000	1423.0	.6780-01	.8690-01	.9520-01	.9345	.5271-02	.3753-02	.6060	4.564	548.0
149	135.00	.92500	1424.0	.5680-01	.7320-01	.8040-01	.9345	.4452-02	.3146-02	.4980	3.686	551.1
149	140.00	.13560	1494.0	.4170-01	.5250-01	.5710-01	.9345	.3164-02	.2312-02	.3990	2.973	536.9
149	140.00	.13730	1495.0	.4190-01	.5270-01	.5730-01	.9345	.3173-02	.2322-02	.4020	2.998	536.2

IH72. RIGHT SRB CLEAN.

HU/HREF

(RVZR54)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
149	140.00	.13890	1496.0	.3520-01	.4420-01	.4800-01	.9345	.2658-02	.1949-02	.3390	2.532	535.2
149	140.00	.14560	1497.0	.3440-01	.4310-01	.4680-01	.9345	.2594-02	.1905-02	.3330	2.488	534.4
149	150.00	.14230	1499.0	.3600-01	.4510-01	.4900-01	.9345	.2716-02	.1992-02	.3480	2.593	535.0
149	180.00	.80000-02	1298.0	.2833	.3895	.4133	.9423	.2289-01	.1569-01	2.041	15.68	579.3
149	180.00	.15000-01	1299.0	.1825	.2376	.2492	.9423	.1380-01	.1011-01	1.547	11.23	556.4
148	180.00	.25000-01	1300.0	.2739	.3580	.3757	.9423	.2081-01	.1517-01	2.290	16.08	558.4
149	180.00	.50000-01	1301.0	.2197	.2923	.3079	.9423	.1706-01	.1217-01	1.738	12.15	566.6
148	180.00	.75000-01	1302.0	.1452	.1930	.2033	.9423	.1126-01	.8042-02	1.151	7.923	566.3
149	180.00	.10000+00	1303.0	.1850	.2490	.2630	.9423	.1457-01	.1025-01	1.413	10.35	571.5
148	225.00	.98000	1425.0	.1578	.2430	.2522	.9467	.1397-01	.8738-02	.8830	8.354	608.3
148	225.00	.99400	1426.0	.1384	.2086	.2159	.9467	.1196-01	.7663-02	.8070	5.918	604.0
148	263.00	.13600	1336.0	.5780-01	.7510-01	.8260-01	.9350	.4574-02	.3199-02	.4910	3.623	555.9
149	263.00	.20000	1472.0	.8880-01	.1172	.1297	.9350	.7182-02	.4921-02	.7210	5.301	563.0
149	263.00	.30000	1337.0	.9770-01	.1296	.1437	.9350	.7958-02	.5412-02	.7800	5.828	565.3
149	263.00	.40000	1473.0	.8250-01	.1127	.1267	.9350	.7016-02	.4568-02	.6040	4.409	577.3
149	263.00	.50000	1474.0	.8270-01	.1131	.1271	.9350	.7041-02	.4579-02	.6040	4.409	577.5
149	263.00	.60000	1475.0	.8990-01	.1233	.1387	.9350	.7686-02	.4980-02	.6520	4.762	578.4
149	263.00	.75000	1338.0	.8850-01	.1201	.1346	.9350	.7457-02	.4900-02	.6590	4.819	574.9
149	263.00	.81500	1339.0	.8420-01	.1135	.1268	.9350	.7024-02	.4665-02	.6410	4.691	572.1
149	263.00	.83700	1340.0	.7220-01	.9740-01	.1088	.9350	.6027-02	.4000-02	.5480	4.014	572.3
149	263.00	.88400	1341.0	.6590-01	.8890-01	.9940-01	.9350	.5506-02	.3648-02	.4990	3.650	572.7
149	263.00	.89400	1342.0	.6470-01	.8720-01	.9730-01	.9350	.5390-02	.3584-02	.4930	3.611	571.8
149	263.00	.90700	1343.0	.6620-01	.8980-01	.1005	.9350	.5570-02	.3666-02	.4950	3.617	574.5
149	263.00	.92800	1477.0	.8300-01	.1129	.1267	.9350	.7016-02	.4598-02	.6150	4.496	575.6
148	263.00	.93900	1344.0	.1228	.1710	.1938	.9350	.1073-01	.6801-02	.8560	6.234	583.5
149	270.00	.80000-02	1304.0	.2486	.3421	.3484	.9476	.1930-01	.1377-01	1.786	13.96	579.7
149	270.00	.50000-01	1306.0	.2728	.3806	.3879	.9476	.2149-01	.1511-01	1.892	13.12	584.2
148	270.00	.75000-01	1307.0	.1799	.2495	.2542	.9476	.1408-01	.9964-02	1.267	8.791	582.2
149	270.00	.10000+00	1308.0	.2062	.2924	.2983	.9476	.1653-01	.1142-01	1.376	9.488	589.0
148	270.00	.11500	1345.0	.1542	.2195	.2514	.9350	.1392-01	.8542-02	1.019	7.394	590.1
148	277.00	.13600	1346.0	.5890-01	.7380-01	.8460-01	.9350	.4684-02	.3263-02	.4960	3.660	557.3
148	277.00	.30000	1347.0	.9940-01	.1325	.1471	.9350	.8149-02	.5506-02	.7830	5.843	567.2
149	277.00	.40000	1464.0	.8190-01	.1118	.1256	.9350	.6959-02	.4536-02	.6010	4.389	577.0
149	277.00	.60000	1466.0	.8410-01	.1161	.1310	.9350	.7258-02	.4658-02	.6000	4.373	580.7
149	277.00	.70000	1467.0	.8310-01	.1150	.1300	.9350	.7200-02	.4603-02	.5880	4.288	581.6
148	277.00	.75000	1348.0	.8230-01	.1127	.1268	.9350	.7025-02	.4556-02	.5980	4.363	578.2
148	277.00	.81500	1349.0	.8280-01	.1129	.1267	.9350	.7017-02	.4587-02	.6110	4.462	576.2
148	277.00	.83700	1350.0	.7280-01	.9960-01	.1119	.9350	.6197-02	.4035-02	.5330	3.894	577.2
148	277.00	.88400	1351.0	.6110-01	.8240-01	.9200-01	.9350	.5097-02	.3382-02	.4630	3.393	572.3
148	277.00	.89400	1352.0	.6630-01	.8980-01	.1005	.9350	.5567-02	.3672-02	.4980	3.640	573.9
149	277.00	.90000	1468.0	.6510-01	.8820-01	.9870-01	.9350	.5470-02	.3607-02	.4880	3.572	574.0
149	277.00	.90700	1353.0	.6670-01	.9040-01	.1011	.9350	.5602-02	.3695-02	.5010	3.663	573.9
149	277.00	.92100	1469.0	.7210-01	.9820-01	.1101	.9350	.6100-02	.3994-02	.5340	3.900	575.8

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, RIGHT SRB CLEAN,

(RVZR54)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
149	277.00	.92800	1470.0	.7860-01	.1072	.1203	.9350	.6665-02	.4354-02	.5790	4.231	576.4
149	277.00	.93700	1471.0	.9040-01	.1238	.1392	.9350	.7712-02	.5009-02	.6590	4.812	577.9
148	277.00	.93900	1354.0	.1278	.1797	.2046	.9350	.1133-01	.7080-02	.8700	6.328	586.4
149	335.00	.11000	1309.0	.2139	.2927	.3053	.9444	.1691-01	.1185-01	1.562	11.41	577.6
148	337.50	.74000	1355.0	.8520-01	.1114	.1230	.9346	.6813-02	.4721-02	.7140	5.265	558.1
148	337.50	.75000	1356.0	.8280-01	.1076	.1186	.9346	.6569-02	.4585-02	.7050	5.293	555.6
149	337.50	.76500	1357.0	.8190-01	.1062	.1169	.9346	.6476-02	.4536-02	.7030	5.283	554.4
149	337.50	.92500	1359.0	.8350-01	.1085	.1195	.9346	.6621-02	.4624-02	.7120	5.256	555.5
149	337.50	.93200	1360.0	.8920-01	.1162	.1282	.9346	.7101-02	.4941-02	.7540	5.563	556.8
149	337.50	.93900	1361.0	.1085	.1427	.1581	.9346	.8760-02	.6009-02	.8880	6.539	561.6

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR55)

RIGHT SRB

PARAMETRIC DATA

ALPHA = 5.000 BETA = -5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
156	5.030	-5.000	3.010	37.00	710.0	252.4	.9920	6.289	2343.	.3296-03	.2018-06	3.827
157	5.030	-5.000	3.010	37.00	710.0	252.5	.9920	6.289	2344.	.3295-03	.2019-06	3.825

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
156	.5539-01	.9264-02
157	.5540-01	.9266-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
157	.00000	.80000-02	1310.0	.2245	.3029	.3295	.9384	.1825-01	.1244-01	1.706	13.06	572.8
156	.00000	.25000-01	1311.0	.1613	.2144	.2321	.9384	.1286-01	.8935-02	1.280	9.247	566.5
156	.00000	.83700	1364.0	.4890-01	.6200-01	.6760-01	.9345	.3742-02	.2711-02	.4570	3.401	541.0
156	.00000	.88400	1365.0	.5750-01	.7220-01	.7840-01	.9345	.4344-02	.3188-02	.5570	4.152	535.1
156	.00000	.90700	1366.0	.5330-01	.6770-01	.7380-01	.9345	.4089-02	.2953-02	.4940	3.675	542.3
156	5.0000	.75000-01	1313.0	.1030	.1346	.1445	.9387	.8006-02	.5708-02	.8650	6.171	558.2
156	5.0000	.11000	1314.0	.5810-01	.7250-01	.7670-01	.9387	.4251-02	.3221-02	.5780	4.322	530.3
156	15.600	.95300	1431.0	.6380-01	.8580-01	.9220-01	.9399	.5107-02	.3532-02	.4880	3.574	571.6
156	20.000	.75000-01	1316.0	.1194	.1580	.1692	.9398	.9373-02	.6614-02	.9600	6.828	564.6
156	20.000	.10000+00	1318.0	.1426	.1916	.2060	.9398	.1141-01	.7900-02	1.097	8.035	570.9
156	20.000	.11000	1319.0	.1547	.2069	.2222	.9398	.1231-01	.8571-02	1.206	8.846	569.0
157	22.500	.72400	1367.0	.4200-01	.5360-01	.5850-01	.9345	.3243-02	.2329-02	.3840	2.899	545.1
156	22.500	.74000	1368.0	.4410-01	.5600-01	.6110-01	.9345	.3384-02	.2443-02	.4090	3.037	542.5
156	22.500	.75000	1369.0	.4440-01	.5630-01	.6130-01	.9345	.3398-02	.2461-02	.4150	3.086	541.2
157	22.500	.76500	1370.0	.4220-01	.5350-01	.5830-01	.9345	.3230-02	.2335-02	.3920	2.963	542.2
157	22.500	.77100	1371.0	.4410-01	.5590-01	.6090-01	.9345	.3375-02	.2441-02	.4100	3.048	542.0
156	22.500	.92500	1372.0	.4360-01	.5530-01	.6030-01	.9345	.3340-02	.2416-02	.4060	3.017	541.8
156	22.500	.93900	1374.0	.7210-01	.9310-01	.1024	.9345	.5672-02	.3994-02	.6280	4.642	552.6
156	24.400	.95300	1433.0	.7760-01	.1045	.1117	.9407	.6187-02	.4301-02	.5940	4.348	571.7
156	35.000	.75000-01	1321.0	.1303	.1738	.1846	.9412	.1022-01	.7221-02	1.026	7.285	567.7

IH72. AEDC V41A-R2A. INTEGRATED VEHICLE HEATING RATES

IH72. RIGHT SRB CLEAN.

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
156	35.000	.11000	1322.0	.1645	.2224	.2371	.9412	.1313-01	.9111-02	1.242	9.241	573.5
156	35.600	.95300	1434.0	.1234	.1669	.1770	.9418	.9808-02	.6833-02	.9300	6.806	573.6
156	40.000	.95300	1435.0	.1462	.1993	.2110	.9423	.1169-01	.8099-02	1.080	7.888	576.5
156	45.000	.74000	1375.0	.7400-01	.9480-01	.1039	.9345	.5754-02	.4101-02	.6640	5.003	547.9
157	45.000	.75000	1376.0	.7610-01	.9740-01	.1066	.9345	.5904-02	.4218-02	.6870	5.178	547.0
157	45.000	.76500	1377.0	.7360-01	.9450-01	.1036	.9345	.5741-02	.4080-02	.6550	4.854	549.3
157	45.000	.77100	1378.0	.7130-01	.9130-01	.1001	.9345	.5544-02	.3947-02	.6370	4.724	548.5
157	45.000	.88400	1381.0	.7670-01	.9720-01	.1060	.9345	.5873-02	.4251-02	.7160	5.323	541.6
157	45.000	.90700	1382.0	.7980-01	.1013	.1106	.9345	.6127-02	.4420-02	.7380	5.480	543.1
156	65.000	.11000	1323.0	.1927	.2665	.2779	.9446	.1540-01	.1067-01	1.367	9.798	581.7
156	67.500	.74000	1383.0	.7830-01	.1020	.1125	.9346	.6229-02	.4338-02	.6630	4.975	556.9
156	67.500	.75000	1384.0	.7490-01	.9800-01	.1083	.9346	.5998-02	.4147-02	.6230	4.670	559.5
157	67.500	.77100	1385.0	.7920-01	.1039	.1149	.9346	.6363-02	.4389-02	.6570	4.835	560.4
156	76.000	.10000+00	1324.0	.1884	.2635	.2722	.9460	.1508-01	.1043-01	1.299	9.450	585.3
156	76.000	.14100	1386.0	.5490-01	.7040-01	.7700-01	.9348	.4267-02	.3042-02	.4910	3.636	548.5
156	76.000	.14800	1387.0	.5740-01	.7370-01	.8070-01	.9348	.4472-02	.3182-02	.5110	3.782	549.3
156	76.000	.15500	1388.0	.6730-01	.8690-01	.9540-01	.9348	.5284-02	.3729-02	.5870	4.340	552.4
156	76.000	.16200	1389.0	.7630-01	.9910-01	.1091	.9348	.6041-02	.4229-02	.6530	4.822	555.3
156	76.000	.25000	1390.0	.7050-01	.9100-01	.9990-01	.9348	.5532-02	.3906-02	.6150	4.627	552.2
156	77.500	.95300	1436.0	.1272	.1860	.1915	.9469	.1061-01	.7045-02	.7910	5.718	597.5
156	77.500	.96700	1437.0	.1402	.2124	.2194	.9469	.1215-01	.7769-02	.8120	5.848	605.3
156	77.500	.99400	1439.0	.1507	.2277	.2352	.9469	.1303-01	.8347-02	.8750	6.306	604.9
157	90.000	.15000-01	1325.0	.2196	.3009	.3064	.9476	.1697-01	.1217-01	1.599	11.87	578.5
156	90.000	.25000-01	1326.0	.2758	.4018	.4110	.9476	.2277-01	.1528-01	1.728	12.30	596.6
157	90.000	.40000-01	1327.0	.2568	.3678	.3757	.9476	.2081-01	.1422-01	1.672	12.12	592.4
156	90.000	.60000-01	1328.0	.2546	.3614	.3690	.9476	.2044-01	.1410-01	1.693	11.52	589.7
156	90.000	.75000-01	1329.0	.1721	.2365	.2409	.9476	.1335-01	.9531-02	1.241	8.357	579.6
157	90.000	.13230	1479.0	.1010	.1322	.1456	.9350	.8068-02	.5594-02	.8420	6.201	559.5
157	90.000	.13390	1480.0	.7850-01	.1016	.1113	.9350	.6168-02	.4349-02	.6810	5.029	553.5
157	90.000	.13560	1481.0	.6710-01	.8630-01	.9430-01	.9350	.5224-02	.3720-02	.5960	4.414	549.7
157	90.000	.13730	1482.0	.5740-01	.7390-01	.8090-01	.9350	.4479-02	.3177-02	.5040	3.731	551.3
157	90.000	.13890	1483.0	.5940-01	.7640-01	.8360-01	.9350	.4632-02	.3291-02	.5240	3.880	550.7
157	90.000	.55000	1391.0	.8700-01	.1146	.1267	.9350	.7021-02	.4817-02	.7080	5.210	563.0
157	90.000	.65000	1392.0	.8010-01	.1064	.1180	.9350	.6537-02	.4438-02	.6380	4.683	566.3
156	90.000	.76500	1394.0	.7610-01	.1028	.1150	.9350	.6368-02	.4213-02	.5740	4.203	573.4
156	90.000	.77100	1395.0	.7740-01	.1044	.1166	.9350	.6459-02	.4285-02	.5870	4.299	572.7
156	90.000	.81500	1396.0	.7770-01	.1049	.1172	.9350	.6490-02	.4305-02	.5900	4.389	572.8
156	90.000	.83700	1397.0	.7790-01	.1051	.1175	.9350	.6507-02	.4313-02	.5900	4.319	572.9
156	90.000	.88400	1398.0	.6230-01	.8240-01	.9130-01	.9350	.5057-02	.3450-02	.5010	3.680	564.6
156	90.000	.89400	1399.0	.6380-01	.8450-01	.9350-01	.9350	.5181-02	.3535-02	.5130	3.772	564.6
156	90.000	.90700	1400.0	.6660-01	.8880-01	.9860-01	.9350	.5462-02	.3689-02	.5240	3.846	567.7
156	90.000	.91700	1401.0	.6720-01	.8960-01	.9950-01	.9350	.5512-02	.3725-02	.5300	3.890	567.5
156	90.000	.93200	1402.0	.7840-01	.1048	.1166	.9350	.6456-02	.4341-02	.6110	4.481	569.0

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR55)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
156	90.000	.93900	1403.0	.9540-01	.1296	.1452	.9350	.8041-02	.5282-02	.7100	5.191	575.3
157	95.000	.13560	1484.0	.6910-01	.8930-01	.9790-01	.9351	.5422-02	.3828-02	.6000	4.437	553.2
157	95.000	.13890	1486.0	.6410-01	.8290-01	.9080-01	.9351	.5030-02	.3552-02	.5570	4.116	553.2
157	95.000	.14560	1487.0	.6370-01	.8280-01	.9100-01	.9351	.5039-02	.3529-02	.5430	4.004	556.2
157	95.000	.14730	1488.0	.7630-01	.9960-01	.1095	.9351	.6068-02	.4229-02	.6430	4.740	558.0
156	104.00	.10000+00	1330.0	.1990	.2836	.2863	.9489	.1586-01	.1102-01	1.312	9.518	590.7
156	104.00	.12000	1404.0	.9110-01	.1183	.1297	.9353	.7183-02	.5046-02	.7790	5.755	555.3
156	104.00	.12700	1405.0	.1262	.1693	.1882	.9353	.1043-01	.6990-02	.9740	7.138	570.4
156	104.00	.13400	1406.0	.7030-01	.9060-01	.9900-01	.9353	.5483-02	.3896-02	.6180	4.574	551.1
156	104.00	.14100	1407.0	.6620-01	.8530-01	.9310-01	.9353	.5159-02	.3668-02	.5830	4.313	550.9
156	104.00	.14800	1408.0	.7970-01	.1035	.1135	.9353	.6286-02	.4413-02	.6800	5.023	555.6
156	104.00	.15500	1409.0	.9100-01	.1191	.1311	.9353	.7261-02	.5040-02	.7570	5.579	559.5
156	104.00	.16200	1410.0	.9560-01	.1259	.1388	.9353	.7689-02	.5297-02	.7820	5.757	562.1
156	104.00	.17300	1411.0	.9890-01	.1313	.1453	.9353	.8051-02	.5479-02	.7880	5.788	565.9
156	104.00	.18000	1412.0	.1004	.1334	.1477	.9353	.8182-02	.5560-02	.7970	5.854	566.4
156	104.00	.18600	1413.0	.1005	.1336	.1479	.9353	.8191-02	.5568-02	.7990	5.867	566.3
156	104.00	.19300	1414.0	.1020	.1356	.1501	.9353	.8316-02	.5648-02	.8090	5.937	566.6
156	104.00	.20000	1415.0	.1043	.1390	.1541	.9353	.8534-02	.5777-02	.8220	6.029	567.6
156	104.00	.25000	1416.0	.1036	.1378	.1526	.9353	.8452-02	.5738-02	.8210	6.127	566.7
157	112.00	.13560	1489.0	.7510-01	.9730-01	.1065	.9354	.5898-02	.4159-02	.6470	4.780	554.4
157	112.00	.13730	1490.0	.7070-01	.9180-01	.1005	.9354	.5568-02	.3917-02	.6060	4.475	555.3
157	112.00	.13890	1491.0	.7270-01	.9460-01	.1038	.9354	.5748-02	.4025-02	.6160	4.544	557.0
157	112.00	.14560	1492.0	.1410-01	.1780-01	.1920-01	.9354	.1066-02	.7830-03	.1350	1.008	537.3
157	112.00	.14730	1493.0	.6900-01	.9030-01	.9920-01	.9354	.5495-02	.3825-02	.5770	4.253	559.1
156	112.50	.74000	1417.0	.8510-01	.1189	.1344	.9354	.7447-02	.4714-02	.5890	4.284	584.8
156	112.50	.75000	1418.0	.8510-01	.1185	.1338	.9354	.7411-02	.4712-02	.5930	4.317	583.9
157	112.50	.77100	1419.0	.7750-01	.1071	.1205	.9354	.6675-02	.4294-02	.5520	4.092	581.4
156	112.50	.92500	1420.0	.7060-01	.9630-01	.1077	.9354	.5967-02	.3913-02	.5210	3.807	576.6
156	112.50	.93200	1421.0	.8110-01	.1107	.1239	.9354	.6865-02	.4493-02	.5960	4.353	577.1
156	112.50	.93900	1422.0	.1021	.1411	.1589	.9354	.8799-02	.5656-02	.7260	5.289	581.5
156	112.50	.95300	1440.0	.8680-01	.1387	.1382	.9503	.7655-02	.4809-02	.4560	3.270	614.9
157	112.50	.96700	1441.0	.1814	.3230	.3214	.9503	.1781-01	.1005-01	.8130	5.790	629.0
157	112.50	.99400	1443.0	.1374	.2243	.2234	.9503	.1237-01	.7612-02	.6980	4.994	618.3
157	135.00	.80000-02	1331.0	.2721	.3963	.3956	.9502	.2192-01	.1507-01	1.707	13.00	596.7
156	135.00	.25000-01	1332.0	.2699	.4010	.4002	.9502	.2217-01	.1495-01	1.624	11.72	601.1
157	135.00	.50000-01	1333.0	.2658	.3878	.3872	.9502	.2145-01	.1472-01	1.661	12.01	597.2
156	135.00	.75000-01	1334.0	.1695	.2372	.2369	.9502	.1312-01	.9390-02	1.167	8.634	585.5
156	135.00	.10000+00	1335.0	.1968	.2818	.2814	.9502	.1559-01	.1090-01	1.283	9.305	592.1
156	135.00	.40000	1423.0	.9570-01	.1295	.1442	.9356	.7990-02	.5303-02	.7210	5.364	573.8
157	135.00	.92500	1424.0	.8940-01	.1275	.1454	.9356	.8052-02	.4952-02	.5880	4.265	591.2
157	140.00	.13560	1494.0	.7610-01	.9910-01	.1086	.9356	.6017-02	.4217-02	.6450	4.758	557.1
157	140.00	.13730	1495.0	.7200-01	.9390-01	.1030	.9356	.5706-02	.3989-02	.6060	4.471	558.0
157	140.00	.13890	1496.0	.7940-01	.1040	.1142	.9356	.6327-02	.4398-02	.6600	4.861	559.9

IH72, RIGHT SRB CLEAN,

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
157	140.00	.14560	1497.0	.1012	.1337	.1473	.9356	.8159-02	.5607-02	.8200	6.027	563.8
157	150.00	.14230	1499.0	.8540-01	.1121	.1232	.9355	.6825-02	.4730-02	.7060	5.198	560.8
157	180.00	.80000-02	1298.0	.2833	.4197	.4298	.9476	.2381-01	.1569-01	1.714	13.02	600.8
156	180.00	.15000-01	1299.0	.2316	.3179	.3238	.9476	.1794-01	.1283-01	1.677	12.03	579.3
157	180.00	.25000-01	1300.0	.3505	.5003	.5110	.9476	.2831-01	.1942-01	2.302	15.90	591.2
156	180.00	.50000-01	1301.0	.2533	.3570	.3643	.9476	.2018-01	.1403-01	1.716	11.87	587.7
157	180.00	.75000-01	1302.0	.1583	.2175	.2215	.9476	.1227-01	.8771-02	1.145	7.830	579.2
156	180.00	.10000+00	1303.0	.1918	.2750	.2810	.9476	.1557-01	.1063-01	1.246	9.034	592.7
156	225.00	.98000	1425.0	.1613	.2276	.2417	.9429	.1339-01	.8933-02	1.088	7.904	588.0
156	225.00	.99400	1426.0	.1501	.2124	.2258	.9429	.1251-01	.8317-02	1.007	7.311	588.7
156	263.00	.13600	1336.0	.3800-01	.4760-01	.5160-01	.9345	.2860-02	.2103-02	.3700	2.759	534.0
157	263.00	.20000	1472.0	.5280-01	.6640-01	.7220-01	.9345	.3997-02	.2924-02	.5060	3.773	536.8
157	263.00	.30000	1337.0	.6530-01	.8180-01	.8870-01	.9345	.4915-02	.3617-02	.6370	4.839	533.8
157	263.00	.40000	1473.0	.6100-01	.7760-01	.8470-01	.9345	.4691-02	.3380-02	.5620	4.177	543.6
157	263.00	.50000	1474.0	.5090-01	.6430-01	.7000-01	.9345	.3880-02	.2820-02	.4800	3.573	539.7
157	263.00	.60000	1475.0	.4880-01	.6140-01	.6670-01	.9345	.3696-02	.2706-02	.4700	3.500	536.5
157	263.00	.75000	1338.0	.5160-01	.6450-01	.6990-01	.9345	.3873-02	.2859-02	.5080	3.794	532.4
157	263.00	.81500	1339.0	.5450-01	.6790-01	.7350-01	.9345	.4071-02	.3020-02	.5440	4.071	529.8
157	263.00	.83700	1340.0	.5200-01	.6510-01	.7060-01	.9345	.3909-02	.2881-02	.5090	3.804	533.2
157	263.00	.88400	1341.0	.5430-01	.6800-01	.7380-01	.9345	.4086-02	.3007-02	.5300	3.955	533.8
157	263.00	.89400	1342.0	.5560-01	.6980-01	.7570-01	.9345	.4196-02	.3079-02	.5370	4.009	535.4
157	263.00	.90700	1343.0	.5470-01	.6910-01	.7520-01	.9345	.4167-02	.3031-02	.5170	3.849	539.4
157	263.00	.92800	1477.0	.6110-01	.7750-01	.8460-01	.9345	.4687-02	.3382-02	.5650	4.198	542.9
156	263.00	.93900	1344.0	.8660-01	.1119	.1230	.9345	.6813-02	.4799-02	.7550	5.581	552.5
157	270.00	.80000-02	1304.0	.2100	.2803	.3038	.9384	.1683-01	.1163-01	1.646	12.94	568.4
157	270.00	.50000-01	1306.0	.1752	.2321	.2510	.9384	.1390-01	.9704-02	1.405	9.830	565.2
156	270.00	.75000-01	1307.0	.1151	.1509	.1626	.9384	.9008-02	.6377-02	.9540	6.694	560.1
157	270.00	.10000+00	1308.0	.1356	.1820	.1976	.9384	.1095-01	.7515-02	1.048	7.682	570.5
156	270.00	.11500	1345.0	.9820-01	.1310	.1462	.9345	.8098-02	.5441-02	.7710	5.656	568.1
156	277.00	.13600	1346.0	.3730-01	.4670-01	.5070-01	.9345	.2810-02	.2065-02	.3620	2.703	534.4
156	277.00	.30000	1347.0	.6730-01	.8450-01	.9170-01	.9345	.5081-02	.3727-02	.6500	4.932	535.3
157	277.00	.40000	1464.0	.5820-01	.7380-01	.8050-01	.9345	.4458-02	.3225-02	.5420	4.030	541.9
157	277.00	.60000	1466.0	.6700-01	.8500-01	.9280-01	.9345	.5138-02	.3713-02	.6220	4.625	542.4
157	277.00	.70000	1467.0	.6670-01	.8530-01	.9340-01	.9345	.5174-02	.3697-02	.6020	4.464	547.1
156	277.00	.75000	1348.0	.7460-01	.9420-01	.1025	.9345	.5678-02	.4134-02	.7070	5.265	538.7
156	277.00	.81500	1349.0	.7820-01	.9830-01	.1069	.9345	.5920-02	.4330-02	.7500	5.589	536.6
156	277.00	.83700	1350.0	.7230-01	.9130-01	.9950-01	.9345	.5510-02	.4003-02	.6800	5.062	539.8
156	277.00	.88400	1351.0	.7070-01	.8880-01	.9640-01	.9345	.5342-02	.3918-02	.6830	5.094	535.4
156	277.00	.89400	1352.0	.7020-01	.8850-01	.9630-01	.9345	.5335-02	.3888-02	.6660	4.961	538.4
157	277.00	.90000	1468.0	.6880-01	.8710-01	.9490-01	.9345	.5259-02	.3812-02	.6440	4.790	541.0
157	277.00	.90700	1353.0	.7040-01	.8920-01	.9730-01	.9345	.5388-02	.3899-02	.6560	4.878	541.7
157	277.00	.92100	1469.0	.6870-01	.8720-01	.9520-01	.9345	.5272-02	.3807-02	.6370	4.734	542.6
157	277.00	.92800	1470.0	.7260-01	.9250-01	.1011	.9345	.5600-02	.4024-02	.6650	4.935	544.8

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR55)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
157	277.00	.93700	1471.0	.8020-01	.1027	.1125	.9345	.6229-02	.4445-02	.7220	5.348	547.7
156	277.00	.93900	1354.0	.1105	.1439	.1588	.9345	.8794-02	.6121-02	.9360	6.907	556.8
157	335.00	.11000	1309.0	.1280	.1702	.1855	.9375	.1028-01	.7092-02	1.016	7.462	566.7
156	337.50	.74000	1355.0	.9370-01	.1210	.1330	.9345	.7368-02	.5191-02	.8170	6.038	552.5
156	337.50	.75000	1356.0	.8860-01	.1140	.1251	.9345	.6930-02	.4910-02	.7830	5.896	550.2
157	337.50	.76500	1357.0	.9110-01	.1175	.1291	.9345	.7152-02	.5047-02	.7980	6.000	551.9
157	337.50	.92500	1359.0	.9550-01	.1243	.1372	.9345	.7598-02	.5292-02	.8110	5.982	556.8
157	337.50	.93200	1360.0	.9850-01	.1287	.1422	.9345	.7878-02	.5454-02	.8250	6.078	558.8
157	337.50	.93900	1361.0	.1181	.1567	.1743	.9345	.9654-02	.6545-02	.9450	6.941	565.6

RIGHT SRB

IH72, RIGHT SRB CLEAN, HU/HREF

PARAMETRIC DATA

ALPHA = 5.000 BETA = .0000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
152	4.980	.0000	3.010	37.00	710.0	252.3	.9920	6.291	2343.	.3298-03	.2018-06	3.829
153	4.970	.0000	3.010	37.00	710.0	252.4	.9920	6.289	2343.	.3296-03	.2018-06	3.827

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
152	.5540-01	.9261-02
153	.5539-01	.9264-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
153	.00000	.80000-02	1310.0	.2344	.3071	.3306	.9385	.1832-01	.1299-01	1.948	15.00	559.8
152	.00000	.25000-01	1311.0	.1619	.2085	.2233	.9385	.1237-01	.8967-02	1.422	10.35	551.0
152	.00000	.83700	1364.0	.7730-01	.1000+00	.1101	.9345	.6099-02	.4281-02	.6680	4.934	553.7
152	.00000	.88400	1365.0	.8830-01	.1134	.1243	.9345	.6889-02	.4892-02	.7840	5.809	549.3
152	.00000	.90700	1366.0	.9320-01	.1209	.1331	.9345	.7375-02	.5166-02	.8020	5.921	554.4
152	5.0000	.75000-01	1313.0	.1122	.1448	.1552	.9385	.8596-02	.6217-02	.9800	7.017	551.9
152	5.0000	.11000	1314.0	.8140-01	.1021	.1084	.9385	.6005-02	.4509-02	.7900	5.896	534.4
152	15.600	.95300	1431.0	.1459	.2083	.2299	.9391	.1273-01	.8082-02	.9570	6.938	591.3
152	20.000	.75000-01	1316.0	.1222	.1584	.1698	.9387	.9410-02	.6771-02	1.051	7.513	554.4
152	20.000	.10000+00	1318.0	.1507	.1971	.2119	.9387	.1174-01	.8348-02	1.257	9.265	559.0
152	20.000	.11000	1319.0	.1580	.2062	.2214	.9387	.1227-01	.8756-02	1.331	9.818	557.6
153	22.500	.72400	1367.0	.7230-01	.9270-01	.1016	.9345	.5628-02	.4004-02	.6450	4.858	548.7
152	22.500	.74000	1368.0	.7660-01	.9780-01	.1069	.9345	.5923-02	.4246-02	.6970	5.170	545.5
152	22.500	.75000	1369.0	.7710-01	.9830-01	.1075	.9345	.5955-02	.4272-02	.7020	5.214	545.2
153	22.500	.76500	1370.0	.7410-01	.9450-01	.1032	.9345	.5719-02	.4105-02	.6760	5.104	545.1
153	22.500	.77100	1371.0	.7770-01	.9900-01	.1083	.9345	.5997-02	.4302-02	.7080	5.253	545.3
152	22.500	.92500	1372.0	.8600-01	.1095	.1197	.9345	.6631-02	.4763-02	.7860	5.836	544.6
152	22.500	.93900	1374.0	.1142	.1480	.1629	.9345	.9023-02	.6329-02	.9850	7.281	553.9
152	24.400	.95300	1433.0	.1206	.1672	.1824	.9392	.1010-01	.6683-02	.8510	6.202	582.2
152	35.000	.75000-01	1321.0	.1327	.1727	.1849	.9391	.1025-01	.7354-02	1.126	8.044	556.4

IH72, RIGHT SRB CLEAN,

HU/HREF

(RVZR56)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
152	35.000	.11000	1322.0	.1583	.2073	.2223	.9391	.1232-01	.8770-02	1.317	9.867	559.5
152	35.600	.95300	1434.0	.8910-01	.1198	.1291	.9396	.7154-02	.4935-02	.6820	4.995	571.4
152	40.000	.95300	1435.0	.8290-01	.1106	.1187	.9398	.6578-02	.4591-02	.6500	4.766	568.1
152	45.000	.74000	1375.0	.5020-01	.6350-01	.6910-01	.9345	.3831-02	.2783-02	.4730	3.579	539.7
152	45.000	.75000	1376.0	.4870-01	.6150-01	.6690-01	.9345	.3708-02	.2700-02	.4620	3.498	538.5
153	45.000	.76500	1377.0	.4750-01	.6000-01	.6540-01	.9345	.3621-02	.2630-02	.4470	3.328	539.8
153	45.000	.77100	1378.0	.4820-01	.6080-01	.6620-01	.9345	.3668-02	.2670-02	.4560	3.398	538.9
153	45.000	.88400	1381.0	.5010-01	.6260-01	.6790-01	.9345	.3761-02	.2773-02	.4910	3.665	532.8
153	45.000	.90700	1382.0	.5320-01	.6680-01	.7250-01	.9345	.4016-02	.2950-02	.5170	3.854	534.7
152	65.000	.11000	1323.0	.1735	.2295	.2444	.9405	.1354-01	.9614-02	1.400	10.12	564.0
152	67.500	.74000	1383.0	.6260-01	.7940-01	.8650-01	.9345	.4794-02	.3469-02	.5830	4.411	541.5
152	67.500	.75000	1384.0	.5890-01	.7490-01	.8180-01	.9345	.4529-02	.3264-02	.5430	4.104	543.2
153	67.500	.77100	1385.0	.5700-01	.7240-01	.7910-01	.9345	.4379-02	.3156-02	.5260	3.904	543.3
152	76.000	.10000+00	1324.0	.1755	.2328	.2469	.9413	.1368-01	.9721-02	1.401	10.29	565.5
152	76.000	.14100	1386.0	.4080-01	.5110-01	.5550-01	.9345	.3075-02	.2258-02	.3950	2.947	534.7
152	76.000	.14800	1387.0	.3770-01	.4720-01	.5130-01	.9345	.2840-02	.2089-02	.3670	2.739	534.0
152	76.000	.15500	1388.0	.3800-01	.4770-01	.5180-01	.9345	.2870-02	.2105-02	.3670	2.736	535.3
152	76.000	.16200	1389.0	.4180-01	.5260-01	.5720-01	.9345	.3170-02	.2315-02	.3990	2.971	537.4
152	76.000	.25000	1390.0	.5320-01	.6730-01	.7340-01	.9345	.4064-02	.2948-02	.4990	3.774	540.4
152	77.500	.95300	1436.0	.1024	.1360	.1436	.9420	.7956-02	.5672-02	.8130	5.974	566.2
152	77.500	.96700	1437.0	.1358	.1832	.1941	.9420	.1075-01	.7522-02	1.031	7.548	572.5
152	77.500	.99400	1439.0	.1465	.2004	.2129	.9420	.1180-01	.8117-02	1.072	7.826	577.6
153	90.000	.15000-01	1325.0	.1871	.2431	.2548	.9423	.1412-01	.1036-01	1.596	11.98	555.8
152	90.000	.25000-01	1326.0	.2257	.3046	.3218	.9423	.1783-01	.1250-01	1.713	12.34	572.6
153	90.000	.40000-01	1327.0	.2306	.3077	.3243	.9423	.1797-01	.1278-01	1.810	13.28	568.1
152	90.000	.60000-01	1328.0	.2285	.3051	.3217	.9423	.1782-01	.1266-01	1.788	12.30	568.4
152	90.000	.75000-01	1329.0	.1465	.1926	.2023	.9423	.1121-01	.8118-02	1.204	8.184	561.3
153	90.000	.13230	1479.0	.8050-01	.1028	.1125	.9345	.6229-02	.4460-02	.7300	5.418	546.1
153	90.000	.13390	1480.0	.6480-01	.8190-01	.8920-01	.9345	.4941-02	.3588-02	.6090	4.531	540.1
153	90.000	.13560	1481.0	.5280-01	.6640-01	.7210-01	.9345	.3996-02	.2923-02	.5060	3.773	536.6
153	90.000	.13730	1482.0	.4470-01	.5620-01	.6100-01	.9345	.3381-02	.2477-02	.4310	3.213	535.9
153	90.000	.13890	1483.0	.4230-01	.5310-01	.5760-01	.9345	.3192-02	.2342-02	.4090	3.048	535.3
153	90.000	.55000	1391.0	.7950-01	.1010	.1103	.9345	.6110-02	.4404-02	.7340	5.450	543.2
153	90.000	.65000	1392.0	.7840-01	.1001	.1095	.9345	.6067-02	.4345-02	.7120	5.280	546.0
152	90.000	.76500	1394.0	.8480-01	.1082	.1183	.9345	.6556-02	.4698-02	.7700	5.716	545.6
152	90.000	.77100	1395.0	.8450-01	.1077	.1177	.9345	.6521-02	.4679-02	.7700	5.715	545.1
152	90.000	.81500	1396.0	.8440-01	.1075	.1174	.9345	.6505-02	.4676-02	.7730	5.838	544.3
152	90.000	.83700	1397.0	.8550-01	.1088	.1189	.9345	.6587-02	.4737-02	.7840	5.819	544.2
152	90.000	.88400	1398.0	.7180-01	.9040-01	.9840-01	.9345	.5450-02	.3977-02	.6840	5.095	537.6
152	90.000	.89400	1399.0	.7320-01	.9220-01	.1003	.9345	.5556-02	.4056-02	.6980	5.201	537.5
152	90.000	.90700	1400.0	.7540-01	.9540-01	.1039	.9345	.5755-02	.4179-02	.7090	5.277	539.9
152	90.000	.91700	1401.0	.7690-01	.9730-01	.1060	.9345	.5870-02	.4260-02	.7220	5.369	540.2
152	90.000	.93200	1402.0	.7700-01	.9810-01	.1072	.9345	.5939-02	.4266-02	.7040	5.227	544.6

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, RIGHT SRB CLEAN,

(RVZR56)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
152	90.000	.93900	1403.0	.1090	.1404	.1543	.9345	.8546-02	.6038-02	.9560	7.075	551.2
153	95.000	.13560	1484.0	.5440-01	.6870-01	.7480-01	.9345	.4144-02	.3013-02	.5130	3.820	539.5
153	95.000	.13890	1486.0	.4100-01	.5160-01	.5620-01	.9345	.3111-02	.2272-02	.3920	2.918	537.4
153	95.000	.14560	1487.0	.4430-01	.5580-01	.6080-01	.9345	.3366-02	.2453-02	.4200	3.132	538.4
153	95.000	.14730	1488.0	.4420-01	.5590-01	.6080-01	.9345	.3370-02	.2450-02	.4180	3.108	539.4
152	104.00	.10000+00	1330.0	.1857	.2508	.2628	.9435	.1456-01	.1029-01	1.408	10.30	572.8
152	104.00	.12000	1404.0	.7470-01	.9490-01	.1036	.9345	.5740-02	.4140-02	.6900	5.130	542.8
152	104.00	.12700	1405.0	.1071	.1395	.1539	.9345	.8527-02	.5935-02	.9070	6.692	556.P
152	104.00	.13400	1406.0	.5370-01	.6770-01	.7360-01	.9345	.4080-02	.2974-02	.5100	3.797	538.2
152	104.00	.14100	1407.0	.4730-01	.5960-01	.6480-01	.9345	.3587-02	.2622-02	.4520	3.372	537.0
152	104.00	.14800	1408.0	.4680-01	.5900-01	.6420-01	.9345	.3559-02	.2591-02	.4420	3.294	538.8
152	104.00	.15500	1409.0	.5150-01	.6520-01	.7110-01	.9345	.3939-02	.2851-02	.4800	3.568	541.3
152	104.00	.16200	1410.0	.6070-01	.7720-01	.8430-01	.9345	.4669-02	.3364-02	.5590	4.153	543.4
152	104.00	.17300	1411.0	.7620-01	.9790-01	.1073	.9345	.5947-02	.4223-02	.6770	5.014	549.3
152	104.00	.18000	1412.0	.8190-01	.1054	.1157	.9345	.6411-02	.4535-02	.7200	5.329	550.8
152	104.00	.18600	1413.0	.8300-01	.1069	.1174	.9345	.6503-02	.4600-02	.7300	5.405	550.8
152	104.00	.19300	1414.0	.8390-01	.1080	.1185	.9345	.6567-02	.4646-02	.7380	5.462	550.8
152	104.00	.20000	1415.0	.8260-01	.1064	.1169	.9345	.6478-02	.4574-02	.7230	5.349	551.5
152	104.00	.25000	1416.0	.8080-01	.1036	.1136	.9345	.6291-02	.4475-02	.7200	5.427	548.7
153	112.00	.13560	1489.0	.5530-01	.7010-01	.7640-01	.9346	.4234-02	.3063-02	.5140	3.821	541.9
153	112.00	.13730	1490.0	.4800-01	.6090-01	.6640-01	.9346	.3677-02	.2660-02	.4470	3.321	541.8
153	112.00	.13890	1491.0	.4440-01	.5630-01	.6150-01	.9346	.3405-02	.2458-02	.4110	3.053	542.7
153	112.00	.14560	1492.0	.1120-01	.1400-01	.1520-01	.9346	.8416-03	.6201-03	.1090	.8170	533.3
153	112.00	.14730	1493.0	.4240-01	.5400-01	.5900-01	.9346	.3267-02	.2347-02	.3870	2.872	544.9
152	112.50	.74000	1417.0	.8490-01	.1109	.1226	.9346	.6790-02	.4702-02	.7100	5.236	558.6
152	112.50	.75000	1418.0	.8900-01	.1161	.1282	.9346	.7103-02	.4932-02	.7500	5.528	557.6
153	112.50	.77100	1419.0	.8330-01	.1078	.1186	.9346	.6571-02	.4613-02	.7190	5.404	553.9
152	112.50	.92500	1420.0	.7690-01	.1008	.1104	.9346	.6114-02	.4364-02	.7080	5.249	547.4
152	112.50	.93200	1421.0	.8240-01	.1058	.1159	.9346	.6422-02	.4566-02	.7340	5.435	548.9
152	112.50	.93900	1422.0	.9900-01	.1279	.1406	.9346	.7790-02	.5484-02	.8600	6.361	552.7
152	112.50	.95300	1440.0	.1610	.2223	.2314	.9449	.1282-01	.8921-02	1.148	8.368	580.9
153	112.50	.96700	1441.0	.2172	.3016	.3141	.9449	.1740-01	.1203-01	1.526	11.12	582.9
153	112.50	.99400	1443.0	.1581	.2247	.2349	.9449	.1301-01	.8759-02	1.049	7.613	590.0
153	135.00	.80000-02	1331.0	.2707	.3721	.3838	.9459	.2126-01	.1500-01	1.954	15.01	579.5
152	135.00	.25000-01	1332.0	.2529	.3541	.3661	.9459	.2028-01	.1401-01	1.740	12.66	585.4
153	135.00	.50000-01	1333.0	.2465	.3373	.3478	.9459	.1927-01	.1366-01	1.800	13.14	578.0
152	135.00	.75000-01	1334.0	.1663	.2235	.2300	.9459	.1274-01	.9211-02	1.276	9.502	571.1
152	135.00	.10000+00	1335.0	.2000	.2730	.2814	.9459	.1559-01	.1108-01	1.470	10.74	576.9
152	135.00	.40000	1423.0	.8360-01	.1099	.1215	.9347	.6733-02	.4631-02	.6870	5.142	561.3
153	135.00	.92500	1424.0	.8510-01	.1136	.1265	.9347	.7008-02	.4712-02	.6660	4.889	568.4
153	140.00	.13560	1494.0	.5910-01	.7550-01	.8250-01	.9348	.4572-02	.3272-02	.5330	3.949	547.0
153	140.00	.13730	1495.0	.5520-01	.7060-01	.7720-01	.9348	.4277-02	.3057-02	.4960	3.676	547.6
153	140.00	.13890	1496.0	.5500-01	.7050-01	.7710-01	.9348	.4269-02	.3045-02	.4910	3.641	548.4

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR56)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
153	140.00	.14560	1497.0	.6960-01	.8950-01	.9800-01	.9348	.5428-02	.3858-02	.6180	4.574	549.7
153	150.00	.14230	1499.0	.5770-01	.7410-01	.8100-01	.9349	.4489-02	.3197-02	.5140	3.804	549.1
153	180.00	.80000-02	1298.0	.2967	.4202	.4288	.9476	.2375-01	.1643-01	1.984	15.16	589.1
153	180.00	.15000-01	1299.0	.2161	.2882	.2929	.9476	.1622-01	.1197-01	1.698	12.26	567.9
152	180.00	.25000-01	1300.0	.3565	.4877	.4964	.9476	.2750-01	.1975-01	2.605	18.11	577.7
153	180.00	.50000-01	1301.0	.2756	.3787	.3857	.9476	.2136-01	.1527-01	1.991	13.83	579.4
152	180.00	.75000-01	1302.0	.1806	.2431	.2472	.9476	.1370-01	.1000-01	1.380	9.475	571.7
153	180.00	.10000+00	1303.0	.2166	.3043	.3104	.9476	.1719-01	.1200-01	1.476	10.73	586.7
152	225.00	.98000	1425.0	.1533	.2367	.2457	.9467	.1361-01	.8496-02	.8560	6.153	608.9
152	225.00	.99400	1426.0	.1282	.1946	.2015	.9467	.1117-01	.7103-02	.7390	5.323	605.6
152	263.00	.13600	1336.0	.5460-01	.6870-01	.7460-01	.9345	.4135-02	.3024-02	.5230	3.899	536.6
153	263.00	.20000	1472.0	.7760-01	.9810-01	.1068	.9345	.5916-02	.4301-02	.7320	5.451	539.5
153	263.00	.30000	1337.0	.8500-01	.1075	.1171	.9345	.6485-02	.4707-02	.7980	6.040	540.2
153	263.00	.40000	1473.0	.7560-01	.9650-01	.1055	.9345	.5846-02	.4187-02	.6860	5.089	546.0
153	263.00	.50000	1474.0	.7530-01	.9570-01	.1044	.9345	.5784-02	.4172-02	.6960	5.169	543.0
153	263.00	.60000	1475.0	.8540-01	.1085	.1185	.9345	.6562-02	.4729-02	.7870	5.848	543.3
153	263.00	.75000	1338.0	.8770-01	.1106	.1203	.9345	.6664-02	.4861-02	.8350	6.219	538.0
153	263.00	.81500	1339.0	.8540-01	.1068	.1157	.9345	.6412-02	.4733-02	.8410	6.279	532.2
153	263.00	.83700	1340.0	.7640-01	.9590-01	.1041	.9345	.5765-02	.4232-02	.7400	5.520	535.0
153	263.00	.88400	1341.0	.7500-01	.9430-01	.1024	.9345	.5674-02	.4157-02	.7230	5.389	535.9
153	263.00	.89400	1342.0	.7570-01	.9520-01	.1034	.9345	.5728-02	.4193-02	.7280	5.425	536.3
153	263.00	.90700	1343.0	.7380-01	.9330-01	.1017	.9345	.5635-02	.4086-02	.6910	5.139	540.7
153	263.00	.92800	1477.0	.8230-01	.1045	.1140	.9345	.6313-02	.4561-02	.7640	5.678	542.3
152	263.00	.93900	1344.0	.1200	.1542	.1692	.9345	.9373-02	.6647-02	1.062	7.864	549.8
153	270.00	.80000-02	1304.0	.2373	.3149	.3315	.9423	.1836-01	.1315-01	1.894	14.91	565.7
153	270.00	.50000-01	1306.0	.2299	.3059	.3222	.9423	.1785-01	.1274-01	1.821	12.74	566.8
152	270.00	.75000-01	1307.0	.1581	.2079	.2184	.9423	.1210-01	.8757-02	1.297	9.093	561.5
153	270.00	.10000+00	1308.0	.1837	.2475	.2615	.9423	.1448-01	.1018-01	1.400	10.25	572.2
152	270.00	.11500	1345.0	.1410	.1902	.2133	.9345	.1182-01	.7812-02	1.071	7.843	572.5
152	277.00	.13000	1346.0	.4860-01	.6090-01	.6610-01	.9345	.3665-02	.2693-02	.4720	3.524	534.3
152	277.00	.30000	1347.0	.8170-01	.1028	.1117	.9345	.6187-02	.4528-02	.7850	5.948	536.3
153	277.00	.40000	1464.0	.7420-01	.9390-01	.1024	.9345	.5672-02	.4109-02	.6930	5.156	541.1
153	277.00	.60000	1466.0	.8160-01	.1030	.1121	.9345	.6208-02	.4518-02	.7720	5.745	539.0
153	277.00	.70000	1467.0	.7760-01	.9840-01	.1073	.9345	.5946-02	.4299-02	.7220	5.366	541.9
152	277.00	.75000	1348.0	.8340-01	.1046	.1136	.9345	.6292-02	.4623-02	.8100	6.047	534.3
152	277.00	.81500	1349.0	.8360-01	.1044	.1131	.9345	.6265-02	.4632-02	.8260	6.176	531.2
152	277.00	.83700	1350.0	.7930-01	.9940-01	.1079	.9345	.5977-02	.4396-02	.7720	5.764	533.9
152	277.00	.88400	1351.0	.7010-01	.8730-01	.9450-01	.9345	.5237-02	.3881-02	.6970	5.212	530.1
152	277.00	.89400	1352.0	.7200-01	.9010-01	.9760-01	.9345	.5408-02	.3991-02	.7080	5.291	532.2
153	277.00	.90000	1468.0	.7340-01	.9190-01	.9960-01	.9345	.5519-02	.4068-02	.7190	5.371	533.0
153	277.00	.90700	1353.0	.7110-01	.8900-01	.9650-01	.9345	.5344-02	.3937-02	.6950	5.192	533.2
153	277.00	.92100	1469.0	.7470-01	.9380-01	.1018	.9345	.5641-02	.4138-02	.7230	5.389	535.2
153	277.00	.92800	1470.0	.7650-01	.9640-01	.1049	.9345	.5808-02	.4239-02	.7290	5.433	537.8

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, RIGHT SRB CLEAN,

(RVZR56)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	HU/HREF H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
153	277.00	.93700	1471.0	.8080-01	.1023	.1115	.9345	.6179-02	.4473-02	.7530	5.602	541.4
152	277.00	.93900	1354.0	.1022	.1314	.1442	.9345	.7990-02	.5664-02	.9040	6.694	550.0
153	335.00	.11000	1309.0	.1595	.2091	.2248	.9388	.1245-01	.8838-02	1.323	9.744	560.1
152	337.50	.74000	1355.0	.7020-01	.8900-01	.9720-01	.9345	.5383-02	.3887-02	.6500	4.831	542.4
152	337.50	.75000	1356.0	.6840-01	.8660-01	.9440-01	.9345	.5229-02	.3791-02	.6400	4.844	540.7
153	337.50	.76500	1357.0	.6670-01	.8410-01	.9160-01	.9345	.5073-02	.3692-02	.6310	4.774	539.0
153	337.50	.92500	1359.0	.8730-01	.1108	.1208	.9345	.6694-02	.4833-02	.8090	6.009	542.5
153	337.50	.93200	1360.0	.1045	.1333	.1457	.9345	.8072-02	.5788-02	.9510	7.056	545.5
153	337.50	.93900	1361.0	.1201	.1555	.1712	.9345	.9484-02	.6651-02	1.035	7.647	554.2

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR57)

RIGHT SRB

PARAMETRIC DATA

ALPHA = 5.000 BETA = 5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
154	5.010	5.000	3.010	36.90	710.0	252.4	.9900	6.281	2343.	.3292-03	.2018-06	3.822
155	5.020	5.000	3.010	37.00	710.0	252.4	.9920	6.290	2343.	.3296-03	.2019-06	3.827

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
154	.5536-01	.9270-02
155	.5540-01	.9264-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
155	.00000	.80000-02	1310.0	.2335	.3069	.3310	.9384	.1834-01	.1294-01	1.919	14.77	561.5
154	.00000	.25000-01	1311.0	.1660	.2196	.2373	.9384	.1314-01	.9190-02	1.337	9.668	564.2
154	.00000	.83700	1364.0	.5010-01	.6410-01	.7020-01	.9345	.3884-02	.2773-02	.4500	3.339	547.3
154	.00000	.88400	1365.0	.5730-01	.7310-01	.7990-01	.9345	.4422-02	.3173-02	.5230	3.878	545.1
154	.00000	.90700	1366.0	.6090-01	.7810-01	.8560-01	.9345	.4736-02	.3372-02	.5440	4.031	548.4
154	5.0000	.75000-01	1313.0	.1076	.1405	.1514	.9382	.8382-02	.5959-02	.9040	6.454	558.0
154	5.0000	.11000	1314.0	.9600-01	.1246	.1340	.9382	.7420-02	.5313-02	.8210	6.062	555.2
154	15.600	.95300	1431.0	.1760	.2461	.2718	.9381	.1504-01	.9743-02	1.214	8.832	585.1
154	20.000	.75000-01	1316.0	.1072	.1408	.1527	.9376	.8452-02	.5934-02	.8820	6.285	561.1
154	20.000	.10000+00	1318.0	.1364	.1809	.1968	.9376	.1089-01	.7550-02	1.090	8.005	565.4
154	20.000	.11000	1319.0	.1397	.1847	.2007	.9376	.1111-01	.7732-02	1.126	8.280	564.1
155	22.500	.72400	1367.0	.8690-01	.1121	.1232	.9345	.6824-02	.4815-02	.7600	5.718	551.9
154	22.500	.74000	1368.0	.8130-01	.1057	.1166	.9345	.6453-02	.4501-02	.6920	5.108	556.0
154	22.500	.75000	1369.0	.9010-01	.1169	.1288	.9345	.7129-02	.4990-02	.7730	5.710	554.8
155	22.500	.76500	1370.0	.8650-01	.1110	.1217	.9345	.6742-02	.4794-02	.7710	5.810	548.9
155	22.500	.77100	1371.0	.8670-01	.1113	.1220	.9345	.6760-02	.4803-02	.7710	5.712	549.2
154	22.500	.92500	1372.0	.9170-01	.1186	.1304	.9345	.7220-02	.5078-02	.7960	5.883	553.0
154	22.500	.93900	1374.0	.1058	.1387	.1535	.9345	.8496-02	.5858-02	.8770	6.462	560.0
154	24.400	.95300	1433.0	.1820	.2629	.2946	.9379	.1631-01	.1007-01	1.162	8.413	594.4
154	35.000	.75000-01	1321.0	.1131	.1485	.1614	.9373	.8932-02	.6264-02	.9330	6.649	560.8

DATE 23 JUN 81

IH72. AEDC V41A-R2A. INTEGRATED VEHICLE HEATING RATES

IH72. RIGHT SRB CLEAN.

(RVZR57)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
154	35.000	.11000	1322.0	.1352	.1785	.1943	.9373	.1075-01	.7485-02	1.095	8.192	563.4
154	35.600	.95300	1434.0	.1594	.2354	.2668	.9377	.1477-01	.8822-02	.9690	7.002	599.8
154	40.000	.95300	1435.0	.1506	.2244	.2554	.9376	.1414-01	.8337-02	.8990	6.488	601.9
154	45.000	.74000	1375.0	.1050	.1394	.1552	.9345	.8589-02	.5812-02	.8350	6.240	566.0
154	45.000	.75000	1376.0	.1039	.1377	.1531	.9345	.8477-02	.5754-02	.8330	6.222	565.0
155	45.000	.76500	1377.0	.9910-01	.1303	.1444	.9345	.7999-02	.5492-02	.8150	5.997	561.5
155	45.000	.77100	1378.0	.1023	.1343	.1486	.9345	.8234-02	.5669-02	.8460	6.232	560.6
155	45.000	.88400	1381.0	.9590-01	.1239	.1362	.9345	.7548-02	.5310-02	.8330	6.157	553.0
155	45.000	.90700	1382.0	.9260-01	.1198	.1318	.9345	.7300-02	.5128-02	.8010	5.923	553.6
154	65.000	.11000	1323.0	.1392	.1838	.1998	.9375	.1106-01	.7706-02	1.128	8.160	563.3
154	67.500	.74000	1383.0	.1043	.1360	.1501	.9345	.8308-02	.5776-02	.8810	6.611	557.2
154	67.500	.75000	1384.0	.9900-01	.1296	.1433	.9345	.7931-02	.5483-02	.8260	6.189	559.1
155	67.500	.77100	1385.0	.1052	.1364	.1502	.9345	.8324-02	.5827-02	.9030	6.673	554.8
154	76.000	.10000+00	1324.0	.1407	.1862	.2022	.9378	.1119-01	.7789-02	1.131	8.311	564.5
154	76.000	.14100	1386.0	.3010-01	.3800-01	.4140-01	.9345	.2291-02	.1666-02	.2840	2.113	539.3
154	76.000	.14800	1387.0	.2530-01	.3190-01	.3470-01	.9345	.1919-02	.1400-02	.2410	1.792	537.9
154	76.000	.15500	1388.0	.2460-01	.3090-01	.3360-01	.9345	.1863-02	.1360-02	.2350	1.747	537.3
154	76.000	.16200	1389.0	.2230-01	.2810-01	.3060-01	.9345	.1695-02	.1237-02	.2130	1.585	537.7
154	76.000	.25000	1390.0	.4670-01	.5930-01	.6470-01	.9345	.3584-02	.2585-02	.4310	3.258	542.9
154	77.500	.95300	1436.0	.1849	.2578	.2840	.9383	.1572-01	.1024-01	1.285	9.354	584.2
154	77.500	.96700	1437.0	.1577	.2197	.2421	.9383	.1340-01	.8732-02	1.098	7.993	584.0
154	77.500	.99400	1439.0	.1461	.2016	.2213	.9383	.1225-01	.8087-02	1.042	7.598	580.8
155	90.000	.15000-01	1325.0	.1542	.1975	.2112	.9384	.1170-01	.8544-02	1.385	10.44	547.8
154	90.000	.25000-01	1326.0	.1819	.2428	.2632	.9384	.1457-01	.1007-01	1.424	10.27	568.3
155	90.000	.40000-01	1327.0	.1868	.2445	.2633	.9384	.1459-01	.1035-01	1.557	11.47	559.4
154	90.000	.60000-01	1328.0	.1832	.2430	.2628	.9384	.1455-01	.1014-01	1.464	10.08	565.4
154	90.000	.75000-01	1329.0	.1278	.1674	.1803	.9384	.9983-02	.7077-02	1.062	7.226	559.6
155	90.000	.13230	1479.0	.6280-01	.7990-01	.8720-01	.9345	.4831-02	.3482-02	.5800	4.305	543.4
155	90.000	.13390	1480.0	.4780-01	.6040-01	.6570-01	.9345	.3638-02	.2651-02	.4540	3.380	538.6
155	90.000	.13560	1481.0	.3770-01	.4730-01	.5130-01	.9345	.2842-02	.2087-02	.3660	2.728	534.7
155	90.000	.13730	1482.0	.3340-01	.4180-01	.4540-01	.9345	.2513-02	.1850-02	.3260	2.431	533.8
155	90.000	.13890	1483.0	.3090-01	.3860-01	.4180-01	.9345	.2316-02	.1710-02	.3040	2.272	532.0
155	90.000	.55000	1391.0	.4630-01	.5840-01	.6350-01	.9345	.3520-02	.2567-02	.4410	3.283	538.1
155	90.000	.65000	1392.0	.5580-01	.7080-01	.7720-01	.9345	.4277-02	.3091-02	.5190	3.855	542.1
154	90.000	.76500	1394.0	.5920-01	.7620-01	.8360-01	.9345	.4628-02	.3276-02	.5210	3.859	550.6
154	90.000	.77100	1395.0	.5960-01	.7670-01	.8410-01	.9345	.4656-02	.3301-02	.5270	3.902	550.0
154	90.000	.81500	1396.0	.6070-01	.7810-01	.8560-01	.9345	.4740-02	.3362-02	.5380	4.048	549.8
154	90.000	.83700	1397.0	.6210-01	.7980-01	.8760-01	.9345	.4849-02	.3438-02	.5490	4.067	550.0
154	90.000	.88400	1398.0	.5480-01	.7010-01	.7670-01	.9345	.4247-02	.3036-02	.4950	3.669	546.7
154	90.000	.89400	1399.0	.5230-01	.6680-01	.7310-01	.9345	.4046-02	.2894-02	.4720	3.502	546.6
154	90.000	.90700	1400.0	.5260-01	.6740-01	.7390-01	.9345	.4090-02	.2910-02	.4690	3.474	548.6
154	90.000	.91700	1401.0	.5420-01	.6960-01	.7640-01	.9345	.4228-02	.3002-02	.4810	3.566	549.3
154	90.000	.93200	1402.0	.6480-01	.8360-01	.9180-01	.9345	.5083-02	.3587-02	.5660	4.189	551.8

IH72, RIGHT SRB CLEAN,

HU/HREF

(RVZR57)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
154	90.000	.93900	1403.0	.8610-01	.1126	.1246	.9345	.6896-02	.4764-02	.7160	5.278	559.4
155	95.000	.13560	1484.0	.4230-01	.5320-01	.5780-01	.9345	.3203-02	.2346-02	.4070	3.038	536.2
155	95.000	.13890	1486.0	.3420-01	.4270-01	.4630-01	.9345	.2566-02	.1895-02	.3370	2.519	531.9
155	95.000	.14560	1487.0	.2820-01	.3520-01	.3820-01	.9345	.2116-02	.1562-02	.2780	2.076	532.0
155	95.000	.14730	1488.0	.2750-01	.3420-01	.3710-01	.9345	.2054-02	.1521-02	.2730	2.040	530.5
154	104.00	.10000+00	1330.0	.1578	.2099	.2257	.9393	.1250-01	.8738-02	1.251	9.182	566.6
154	104.00	.12000	1404.0	.5410-01	.6890-01	.7540-01	.9345	.4173-02	.2993-02	.4920	3.653	545.3
154	104.00	.12700	1405.0	.8470-01	.1101	.1214	.9345	.6722-02	.4690-02	.7220	5.326	555.9
154	104.00	.13400	1406.0	.3770-01	.4770-01	.5200-01	.9345	.2877-02	.2088-02	.3540	2.632	540.3
154	104.00	.14100	1407.0	.3320-01	.4180-01	.4550-01	.9345	.2517-02	.1835-02	.3150	2.348	538.0
154	104.00	.14800	1408.0	.3060-01	.3850-01	.4180-01	.9345	.2316-02	.1695-02	.2930	2.188	536.5
154	104.00	.15500	1409.0	.3070-01	.3860-01	.4190-01	.9345	.2320-02	.1698-02	.2950	2.196	536.3
154	104.00	.16200	1410.0	.3040-01	.3820-01	.4150-01	.9345	.2300-02	.1683-02	.2920	2.173	536.5
154	104.00	.17300	1411.0	.3380-01	.4280-01	.4670-01	.9345	.2585-02	.1872-02	.3150	2.345	541.3
154	104.00	.18000	1412.0	.3950-01	.5030-01	.5490-01	.9345	.3042-02	.2188-02	.3620	2.690	544.1
154	104.00	.18600	1413.0	.4440-01	.5670-01	.6200-01	.9345	.3433-02	.2459-02	.4030	2.991	545.8
154	104.00	.19300	1414.0	.5220-01	.6680-01	.7310-01	.9345	.4049-02	.2891-02	.4700	3.483	547.2
154	104.00	.20000	1415.0	.5720-01	.7340-01	.8040-01	.9345	.4451-02	.3167-02	.5110	3.783	548.5
154	104.00	.25000	1416.0	.6260-01	.7970-01	.8710-01	.9345	.4820-02	.3463-02	.5720	4.317	544.6
155	112.00	.13560	1489.0	.4590-01	.5770-01	.6270-01	.9345	.3475-02	.2542-02	.4400	3.279	536.7
155	112.00	.13730	1490.0	.4320-01	.5420-01	.5890-01	.9345	.3261-02	.2393-02	.4180	3.119	535.1
155	112.00	.13890	1491.0	.3950-01	.4950-01	.5380-01	.9345	.2978-02	.2190-02	.3850	2.871	534.2
155	112.00	.14560	1492.0	.8200-02	.1020-01	.1110-01	.9345	.6131-03	.4528-03	.8100-01	.6020	531.9
155	112.00	.14730	1493.0	.2670-01	.3350-01	.3640-01	.9345	.2017-02	.1477-02	.2560	1.911	536.3
154	112.50	.74000	1417.0	.4930-01	.6320-01	.6930-01	.9345	.3837-02	.2726-02	.4380	3.244	549.1
154	112.50	.75000	1418.0	.4540-01	.5820-01	.6380-01	.9345	.3532-02	.2515-02	.4060	3.010	548.2
155	112.50	.77100	1419.0	.4390-01	.5560-01	.6060-01	.9345	.3357-02	.2434-02	.4110	3.113	540.8
154	112.50	.92500	1420.0	.4970-01	.6410-01	.7040-01	.9345	.3898-02	.2753-02	.4350	3.222	551.5
154	112.50	.93200	1421.0	.5540-01	.7170-01	.7890-01	.9345	.4365-02	.3065-02	.4780	3.534	553.7
154	112.50	.93900	1422.0	.8810-01	.1154	.1276	.9345	.7066-02	.4876-02	.7320	5.390	559.7
154	112.50	.95300	1440.0	.8930-01	.1227	.1321	.9405	.7312-02	.4941-02	.6430	4.691	579.6
155	112.50	.96700	1441.0	.1513	.1998	.2127	.9405	.1178-01	.8381-02	1.225	9.008	563.7
155	112.50	.99400	1443.0	.9590-01	.1289	.1379	.9405	.7639-02	.5310-02	.7350	5.386	571.4
155	135.00	.80000-02	1331.0	.2628	.3555	.3761	.9423	.2083-01	.1456-01	1.980	15.25	573.8
154	135.00	.25000-01	1332.0	.2300	.3191	.3394	.9423	.1879-01	.1273-01	1.618	11.79	582.6
155	135.00	.50000-01	1333.0	.2201	.2942	.3104	.9423	.1720-01	.1219-01	1.718	12.60	568.9
154	135.00	.75000-01	1334.0	.1540	.2057	.2169	.9423	.1201-01	.8527-02	1.205	8.990	568.4
154	135.00	.10000+00	1335.0	.1842	.2484	.2625	.9423	.1453-01	.1020-01	1.400	10.25	572.4
154	135.00	.40000	1423.0	.6290-01	.8110-01	.8910-01	.9345	.4931-02	.3479-02	.5490	4.133	551.8
155	135.00	.92500	1424.0	.8360-01	.1072	.1175	.9345	.6510-02	.4633-02	.7470	5.534	548.6
155	140.00	.13560	1494.0	.4970-01	.6310-01	.6880-01	.9345	.3813-02	.2755-02	.4620	3.432	542.3
155	140.00	.13730	1495.0	.4450-01	.5640-01	.6150-01	.9345	.3406-02	.2463-02	.4140	3.075	541.9
155	140.00	.13890	1496.0	.4290-01	.5440-01	.5930-01	.9345	.3286-02	.2377-02	.3990	2.970	541.8

IH72, RIGHT SRB CLEAN,

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
155	140.00	.14560	1497.0	.4590-01	.5820-01	.6340-01	.9345	.3514-02	.2545-02	.4290	3.190	541.3
155	150.00	.14230	1499.0	.4480-01	.5690-01	.6200-01	.9346	.3436-02	.2481-02	.4150	3.083	542.6
155	180.00	.80000-02	1298.0	.3019	.4262	.4350	.9475	.2410-01	.1672-01	2.035	15.56	588.2
155	180.00	.15000-01	1299.0	.2206	.2938	.2987	.9475	.1655-01	.1222-01	1.739	12.56	567.5
154	180.00	.25000-01	1300.0	.3675	.5131	.5233	.9475	.2897-01	.2034-01	2.545	17.63	584.6
155	180.00	.50000-01	1301.0	.2756	.3785	.3856	.9475	.2136-01	.1527-01	1.995	13.86	579.2
154	180.00	.75000-01	1302.0	.1865	.2534	.2580	.9475	.1428-01	.1032-01	1.386	9.500	575.4
155	180.00	.10000+00	1303.0	.2220	.3115	.3178	.9475	.1761-01	.1230-01	1.518	11.04	586.4
154	225.00	.98000	1425.0	.1701	.2868	.2829	.9510	.1566-01	.9417-02	.8210	5.866	622.5
154	225.00	.99400	1426.0	.1211	.1903	.1881	.9510	.1041-01	.6704-02	.6550	4.699	612.1
154	263.00	.13600	1336.0	.5940-01	.7740-01	.8500-01	.9351	.4705-02	.3289-02	.5030	3.713	556.8
155	263.00	.20000	1472.0	.8560-01	.1112	.1221	.9351	.6763-02	.4744-02	.7320	5.402	555.6
155	263.00	.30000	1337.0	.1017	.1332	.1466	.9351	.8123-02	.5634-02	.8460	6.342	559.6
155	263.00	.40000	1473.0	.8550-01	.1134	.1255	.9351	.6954-02	.4735-02	.6830	5.017	565.6
155	263.00	.50000	1474.0	.8530-01	.1142	.1270	.9351	.7033-02	.4726-02	.6630	4.862	569.5
155	263.00	.60000	1475.0	.9350-01	.1249	.1388	.9351	.7688-02	.5182-02	.7320	5.370	568.6
155	263.00	.75000	1338.0	.8840-01	.1173	.1298	.9351	.7193-02	.4898-02	.7070	5.191	565.6
155	263.00	.81500	1339.0	.8500-01	.1119	.1235	.9351	.6844-02	.4707-02	.6940	5.108	562.3
155	263.00	.83700	1340.0	.7380-01	.9750-01	.1077	.9351	.5967-02	.4088-02	.5970	4.393	563.7
155	263.00	.88400	1341.0	.6880-01	.9110-01	.1008	.9351	.5583-02	.3813-02	.5540	4.070	564.6
155	263.00	.89400	1342.0	.6540-01	.8640-01	.9550-01	.9351	.5291-02	.3622-02	.5280	3.885	563.9
155	263.00	.90700	1343.0	.6760-01	.9020-01	.1001	.9351	.5544-02	.3747-02	.5320	3.905	567.8
155	263.00	.92800	1477.0	.8530-01	.1137	.1263	.9351	.6996-02	.4723-02	.6690	4.910	568.1
154	263.00	.93900	1344.0	.1160	.1603	.1808	.9351	.1001-01	.6420-02	.8240	6.005	581.4
155	270.00	.80000-02	1304.0	.2607	.3556	.3621	.9475	.2006-01	.1444-01	1.921	15.03	576.8
155	270.00	.50000-01	1306.0	.2727	.3776	.3849	.9475	.2132-01	.1511-01	1.930	13.39	582.1
154	270.00	75000-01	1307.0	.1910	.2623	.2672	.9475	.1479-01	.1057-01	1.379	9.585	579.2
155	270.00	.10000+00	1308.0	.2174	.3065	.3128	.9475	.1733-01	.1204-01	1.470	10.68	587.8
154	270.00	.11500	1345.0	.1583	.2243	.2563	.9350	.1419-01	.8765-02	1.058	7.679	589.1
154	277.00	.13600	1346.0	.5630-01	.7280-01	.7980-01	.9349	.4420-02	.3116-02	.4880	3.608	553.1
154	277.00	.30000	1347.0	.9340-01	.1229	.1358	.9349	.7517-02	.5172-02	.7660	5.734	561.6
155	277.00	.40000	1464.0	.8470-01	.1110	.1224	.9349	.6782-02	.4694-02	.7050	5.192	559.7
155	277.00	.60000	1466.0	.8970-01	.1178	.1302	.9349	.7211-02	.4969-02	.7390	5.441	561.1
155	277.00	.70000	1467.0	.7620-01	.1010	.1120	.9349	.6207-02	.4223-02	.6110	4.487	565.2
154	277.00	.75000	1348.0	.7360-01	.9770-01	.1084	.9349	.6002-02	.4072-02	.5850	4.298	566.0
154	277.00	.81500	1349.0	.7490-01	.9930-01	.1101	.9349	.6097-02	.4147-02	.5990	4.403	565.2
154	277.00	.83700	1350.0	.6980-01	.9260-01	.1027	.9349	.5687-02	.3863-02	.5570	4.091	565.6
154	277.00	.88400	1351.0	.6000-01	.7910-01	.8760-01	.9349	.4847-02	.3320-02	.4870	3.583	563.0
154	277.00	.89400	1352.0	.6690-01	.8850-01	.9810-01	.9349	.5432-02	.3702-02	.5380	3.951	564.5
155	277.00	.90000	1468.0	.7040-01	.9180-01	.1011	.9349	.5600-02	.3902-02	.5950	4.387	557.4
155	277.00	.90700	1353.0	.7200-01	.9380-01	.1033	.9349	.5723-02	.3991-02	.6100	4.500	557.0
155	277.00	.92100	1469.0	.7150-01	.9350-01	.1031	.9349	.5712-02	.3958-02	.5960	4.392	559.3
155	277.00	.92800	1470.0	.8070-01	.1057	.1167	.9349	.6462-02	.4470-02	.6700	4.937	559.9

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR57)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
155	277.00	.93700	1471.0	.8330-01	.1095	.1210	.9349	.6706-02	.4615-02	.6840	5.035	561.6
154	277.00	.93900	1354.0	.1071	.1453	.1629	.9349	.9019-02	.5926-02	.7990	5.841	574.9
155	335.00	.11000	1309.0	.1771	.2357	.2520	.9402	.1396-01	.9809-02	1.400	10.28	567.1
154	337.50	.74000	1355.0	.5420-01	.6910-01	.7560-01	.9345	.4184-02	.3001-02	.4940	3.664	545.2
154	337.50	.75000	1356.0	.5210-01	.6620-01	.7230-01	.9345	.4003-02	.2881-02	.4780	3.612	543.7
155	337.50	.76500	1357.0	.5290-01	.6650-01	.7230-01	.9345	.4005-02	.2930-02	.5080	3.850	536.5
155	337.50	.92500	1359.0	.5230-01	.6590-01	.7170-01	.9345	.3973-02	.2895-02	.4960	3.695	538.4
155	337.50	.93200	1360.0	.7040-01	.8920-01	.9730-01	.9345	.5388-02	.3899-02	.6560	4.877	541.6
155	337.50	.93900	1361.0	.7830-01	.1005	.1102	.9345	.6103-02	.4337-02	.6970	5.162	549.1

IH72, RIGHT SRB CLEAN, HU/HREF

(RVZR58)

RIGHT SRB

PARAMETRIC DATA

ALPHA = -5.000 BETA = -5.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
180	-5.000	-5.000	4.020	72.80	748.0	176.8	.4670	5.282	2619.	.2216-03	.1423-06	4.077
181	-5.040	-5.000	4.020	73.00	748.0	176.8	.4680	5.293	2619.	.2221-03	.1423-06	4.087

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
180	.5117-01	.1139-01
181	.5123-01	.1138-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
181	.00000	.80000-02	1310.0	.2916	.3786	.4084	.9378	.2092-01	.1494-01	2.433	18.50	585.3
180	.00000	.25000-01	1311.0	.2422	.3156	.3410	.9377	.1745-01	.1239-01	1.992	14.24	587.4
180	.00000	.83700	1364.0	.5890-01	.7180-01	.8150-01	.9228	.4171-02	.3014-02	.6280	4.670	540.0
180	.00000	.88400	1365.0	.6370-01	.7740-01	.8770-01	.9228	.4488-02	.3262-02	.6890	5.135	537.0
180	.00000	.90700	1366.0	.6870-01	.8380-01	.9530-01	.9228	.4876-02	.3513-02	.7260	5.397	541.6
180	5.0000	.75000-01	1313.0	.1608	.2023	.2154	.9383	.1102-01	.8228-02	1.499	10.65	566.0
180	15.600	.95300	1431.0	.2107	.2689	.2843	.9402	.1455-01	.1078-01	1.865	13.63	575.3
180	20.000	.75000-01	1316.0	.1841	.2341	.2481	.9396	.1269-01	.9420-02	1.650	11.69	573.0
180	20.000	.10000+00	1318.0	.2114	.2724	.2897	.9396	.1483-01	.1082-01	1.809	13.18	581.0
180	20.000	.11000	1319.0	.2244	.2895	.3080	.9396	.1576-01	.1148-01	1.909	13.91	581.9
180	20.000	.95300	1432.0	.1798	.2302	.2432	.9405	.1244-01	.9203-02	1.573	11.49	577.3
181	22.500	.72400	1367.0	.7720-01	.9460-01	.1074	.9234	.5504-02	.3956-02	.8060	6.082	544.4
180	22.500	.74000	1368.0	.8180-01	.1007	.1149	.9234	.5878-02	.4188-02	.8350	6.184	548.9
180	22.500	.75000	1369.0	.7740-01	.9510-01	.1084	.9234	.5546-02	.3960-02	.7930	5.879	547.9
181	22.500	.76500	1370.0	.7280-01	.8880-01	.1005	.9234	.5150-02	.3729-02	.7740	5.856	540.5
181	22.500	.77100	1371.0	.7300-01	.8910-01	.1009	.9234	.5168-02	.3740-02	.7760	5.770	540.7
180	22.500	.92500	1372.0	.7240-01	.8870-01	.1008	.9234	.5157-02	.3706-02	.7550	5.604	544.5
180	22.500	.93900	1374.0	.8400-01	.1035	.1180	.9234	.6040-02	.4297-02	.8530	6.320	549.6
180	24.400	.95300	1433.0	.2016	.2602	.2748	.9408	.1406-01	.1032-01	1.716	12.50	581.9
180	35.000	.75000-01	1321.0	.2048	.2606	.2749	.9404	.1407-01	.1048-01	1.834	12.99	573.3

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR58)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
180	35.000	.11000	1322.0	.2348	.3033	.3213	.9404	.1644-01	.1202-01	1.992	14.75	582.5
180	35.600	.95300	1434.0	.1901	.2474	.2610	.9413	.1336-01	.9727-02	1.570	11.41	586.8
180	40.000	.95300	1435.0	.1889	.2470	.2607	.9414	.1334-01	.9668-02	1.539	11.17	589.1
180	45.000	.74000	1375.0	.7860-01	.9730-01	.1112	.9236	.5691-02	.4024-02	.7850	5.902	553.1
180	45.000	.75000	1376.0	.7890-01	.9750-01	.1113	.9236	.5698-02	.4036-02	.7910	5.947	552.3
181	45.000	.76500	1377.0	.7600-01	.9330-01	.1061	.9237	.5433-02	.3892-02	.7830	5.810	546.8
181	45.000	.77100	1378.0	.7560-01	.9280-01	.1054	.9237	.5400-02	.3875-02	.7830	5.812	545.9
181	45.000	.88400	1381.0	.7820-01	.9520-01	.1075	.9237	.5506-02	.4004-02	.8380	6.242	538.7
181	45.000	.90700	1382.0	.7280-01	.8890-01	.1006	.9237	.5153-02	.3732-02	.7730	5.746	541.0
180	65.000	.11000	1323.0	.2293	.2960	.3144	.9400	.1609-01	.1173-01	1.947	13.96	582.2
180	67.500	.74000	1383.0	.7810-01	.9650-01	.1102	.9234	.5641-02	.3997-02	.7860	5.917	551.5
180	67.500	.75000	1384.0	.7870-01	.9730-01	.1113	.9234	.5694-02	.4029-02	.7900	5.940	552.2
181	67.500	.77100	1385.0	.7700-01	.9450-01	.1075	.9234	.5506-02	.3944-02	.7970	5.910	546.1
180	76.000	.10000+00	1324.0	.2217	.2856	.3046	.9392	.1559-01	.1134-01	1.897	13.83	581.0
180	76.000	.14100	1386.0	.4220-01	.5140-01	.5810-01	.9232	.2974-02	.2161-02	.4540	3.383	538.0
180	76.000	.14800	1387.0	.4140-01	.5040-01	.5690-01	.9232	.2914-02	.2120-02	.4470	3.329	537.4
180	76.000	.15500	1388.0	.4290-01	.5230-01	.5920-01	.9232	.3028-02	.2197-02	.4600	3.421	539.0
180	76.000	.16200	1389.0	.4760-01	.5800-01	.6580-01	.9232	.3369-02	.2433-02	.5040	3.745	541.3
180	76.000	.25000	1390.0	.5980-01	.7310-01	.8300-01	.9232	.4247-02	.3060-02	.6290	4.752	542.7
180	77.500	.95300	1436.0	.2043	.2613	.2769	.9399	.1417-01	.1045-01	1.792	13.09	576.8
180	77.500	.96700	1437.0	.2154	.2751	.2914	.9399	.1491-01	.1102-01	1.900	13.89	575.8
180	77.500	.99400	1439.0	.2190	.2816	.2988	.9399	.1529-01	.1121-01	1.887	13.77	579.8
181	90.000	.15000-01	1325.0	.2348	.2966	.3170	.9378	.1624-01	.1203-01	2.159	16.11	568.6
180	90.000	.25000-01	1326.0	.2285	.2987	.3230	.9377	.1653-01	.1169-01	1.862	13.30	589.0
181	90.000	.40000-01	1327.0	.2465	.3185	.3430	.9378	.1757-01	.1263-01	2.090	15.22	582.6
180	90.000	.60000-01	1328.0	.2569	.3323	.3581	.9377	.1833-01	.1315-01	2.167	14.79	583.4
180	90.000	.75000-01	1329.0	.1750	.2214	.2369	.9377	.1212-01	.8955-02	1.596	10.80	569.9
181	90.000	.13230	1479.0	.7660-01	.9320-01	.1057	.9228	.5416-02	.3923-02	.8220	6.118	538.7
181	90.000	.13390	1480.0	.5660-01	.6850-01	.7740-01	.9228	.3965-02	.2897-02	.6210	4.636	533.8
181	90.000	.13560	1481.0	.4320-01	.5220-01	.5880-01	.9228	.3013-02	.2211-02	.4790	3.581	531.4
181	90.000	.13730	1482.0	.4440-01	.5360-01	.6040-01	.9228	.3096-02	.2274-02	.4940	3.697	530.6
181	90.000	.13890	1483.0	.3630-01	.4390-01	.4940-01	.9228	.2533-02	.1861-02	.4050	3.027	530.5
181	90.000	.55000	1391.0	.6960-01	.8450-01	.9570-01	.9228	.4903-02	.3563-02	.7530	5.609	536.9
181	90.000	.65000	1392.0	.6480-01	.7900-01	.8970-01	.9228	.4596-02	.3318-02	.6890	5.124	540.5
180	90.000	.74000	1393.0	.3900-02	.4800-02	.5400-02	.9228	.2751-03	.2002-03	.4200-01	.3220	536.1
180	90.000	.76500	1394.0	.6250-01	.7680-01	.8780-01	.9228	.4492-02	.3198-02	.6410	4.752	547.7
180	90.000	.77100	1395.0	.6220-01	.7650-01	.8730-01	.9228	.4466-02	.3185-02	.6410	4.756	546.9
180	90.000	.81500	1396.0	.6270-01	.7690-01	.8770-01	.9228	.4490-02	.3209-02	.6500	4.902	545.8
180	90.000	.83700	1397.0	.6200-01	.7590-01	.8660-01	.9228	.4430-02	.3171-02	.6440	4.783	545.0
180	90.000	.88400	1398.0	.5240-01	.6400-01	.7270-01	.9228	.3719-02	.2684-02	.5570	4.143	540.7
180	90.000	.89400	1399.0	.6370-01	.7740-01	.8770-01	.9228	.4486-02	.3262-02	.6900	5.144	536.6
180	90.000	.90700	1400.0	.5390-01	.6580-01	.7490-01	.9228	.3832-02	.2757-02	.5680	4.219	542.3
180	90.000	.91700	1401.0	.5400-01	.6600-01	.7510-01	.9228	.3845-02	.2763-02	.5670	4.211	543.1

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
180	90.000	.93200	1402.0	.5280-01	.6470-01	.7380-01	.9228	.3776-02	.2700-02	.5470	4.059	545.6
180	90.000	.93900	1403.0	.6040-01	.7450-01	.8530-01	.9228	.4364-02	.3093-02	.6130	4.539	550.0
181	95.000	.13560	1484.0	.4430-01	.5360-01	.6050-01	.9227	.3101-02	.2271-02	.4910	3.670	531.9
181	95.000	.13890	1486.0	.3570-01	.4310-01	.4860-01	.9227	.2491-02	.1829-02	.3980	2.977	530.4
181	95.000	.14560	1487.0	.3560-01	.4300-01	.4850-01	.9227	.2485-02	.1821-02	.3950	2.949	531.5
181	95.000	.14730	1488.0	.3160-01	.3820-01	.4310-01	.9227	.2206-02	.1617-02	.3500	2.615	531.7
180	104.00	.10000+00	1330.0	.1845	.2376	.2584	.9360	.1322-01	.9439-02	1.579	11.51	580.9
180	104.00	.12000	1404.0	.5860-01	.7140-01	.8120-01	.9224	.4157-02	.3000-02	.6260	4.658	539.6
180	104.00	.12700	1405.0	.1036	.1279	.1469	.9224	.7518-02	.5304-02	1.045	7.730	551.2
180	104.00	.13400	1406.0	.4060-01	.4930-01	.5590-01	.9224	.2863-02	.2078-02	.4390	3.276	536.7
180	104.00	.14100	1407.0	.3610-01	.4370-01	.4960-01	.9224	.2537-02	.1846-02	.3930	2.933	535.2
180	104.00	.14800	1408.0	.3460-01	.4200-01	.4760-01	.9224	.2437-02	.1769-02	.3750	2.794	536.4
180	104.00	.15500	1409.0	.3390-01	.4120-01	.4680-01	.9224	.2394-02	.1734-02	.3650	2.721	537.6
180	104.00	.16200	1410.0	.3410-01	.4150-01	.4720-01	.9224	.2415-02	.1746-02	.3650	2.721	538.9
180	104.00	.17300	1411.0	.4020-01	.4910-01	.5600-01	.9224	.2867-02	.2056-02	.4220	3.136	542.9
180	104.00	.18000	1412.0	.4490-01	.5500-01	.6280-01	.9224	.3215-02	.2299-02	.4680	3.476	544.5
180	104.00	.18600	1413.0	.5030-01	.6170-01	.7040-01	.9224	.3604-02	.2575-02	.5230	3.883	545.0
180	104.00	.19300	1414.0	.5960-01	.7300-01	.8340-01	.9224	.4270-02	.3049-02	.6190	4.591	545.3
180	104.00	.20000	1415.0	.6460-01	.7920-01	.9060-01	.9224	.4634-02	.3305-02	.6680	4.958	546.0
180	104.00	.25000	1416.0	.6190-01	.7580-01	.8660-01	.9224	.4431-02	.3168-02	.6450	4.870	544.6
181	112.00	.13560	1489.0	.3750-01	.4530-01	.5130-01	.9223	.2625-02	.1921-02	.4160	3.110	531.4
181	112.00	.13730	1490.0	.3310-01	.4000-01	.4520-01	.9223	.2316-02	.1697-02	.3690	2.760	530.5
181	112.00	.13890	1491.0	.2950-01	.3560-01	.4030-01	.9223	.2063-02	.1511-02	.3280	2.456	530.7
181	112.00	.14560	1492.0	.7300-02	.8900-02	.1000-01	.9223	.5147-03	.3765-03	.8200-01	.6090	531.5
181	112.00	.14730	1493.0	.2020-01	.2440-01	.2770-01	.9223	.1419-02	.1033-02	.2210	1.650	534.2
180	112.50	.74000	1417.0	.4520-01	.5560-01	.6370-01	.9222	.3261-02	.2315-02	.4640	3.440	547.7
180	112.50	.75000	1418.0	.4470-01	.5490-01	.6290-01	.9222	.3217-02	.2285-02	.4590	3.402	547.4
181	112.50	.77100	1419.0	.4630-01	.5630-01	.6400-01	.9223	.3281-02	.2371-02	.4970	3.767	538.3
180	112.50	.92500	1420.0	.4370-01	.5350-01	.6110-01	.9222	.3126-02	.2236-02	.4570	3.391	544.0
180	112.50	.93200	1421.0	.4630-01	.5670-01	.6490-01	.9222	.3319-02	.2367-02	.4800	3.562	545.4
180	112.50	.93900	1422.0	.5110-01	.6300-01	.7220-01	.9222	.3697-02	.2616-02	.5200	3.855	549.2
180	112.50	.95300	1440.0	.1549	.1968	.2133	.9357	.1092-01	.7928-02	1.394	10.20	572.4
181	112.50	.96700	1441.0	.2138	.2673	.2880	.9357	.1475-01	.1095-01	2.047	15.07	561.2
181	112.50	.99400	1443.0	.1763	.2248	.2440	.9357	.1250-01	.9032-02	1.567	11.46	574.6
181	135.00	.80000-02	1331.0	.2453	.3215	.3623	.9318	.1856-01	.1257-01	1.984	15.15	590.2
180	135.00	.25000-01	1332.0	.1474	.1932	.2178	.9318	.1115-01	.7543-02	1.189	8.630	590.5
181	135.00	.50000-01	1333.0	.1695	.2177	.2427	.9318	.1243-01	.8685-02	1.469	10.72	579.0
180	135.00	.75000-01	1334.0	.1028	.1304	.1446	.9318	.7398-02	.5260-02	.9280	6.914	571.7
180	135.00	.10000+00	1335.0	.1408	.1809	.2018	.9318	.1033-01	.7206-02	1.216	8.872	579.5
180	135.00	.40000	1423.0	.3910-01	.4800-01	.5510-01	.9220	.2819-02	.1999-02	.4010	3.024	547.5
181	135.00	.92500	1424.0	.4120-01	.5030-01	.5740-01	.9220	.2939-02	.2109-02	.4350	3.237	541.6
181	140.00	.13560	1494.0	.3490-01	.4230-01	.4790-01	.9220	.2454-02	.1788-02	.3840	2.869	533.2
181	140.00	.13730	1495.0	.2940-01	.3560-01	.4040-01	.9220	.2070-02	.1507-02	.3230	2.412	533.6

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR58)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
181	140.00	.13890	1496.0	.2370-01	.2870-01	.3260-01	.9220	.1669-02	.1212-02	.2580	1.926	535.0
181	140.00	.14560	1497.0	.1930-01	.2340-01	.2660-01	.9220	.1362-02	.9863-03	.2090	1.557	536.3
181	150.00	.14230	1499.0	.2050-01	.2490-01	.2820-01	.9220	.1446-02	.1049-02	.2230	1.662	535.7
181	180.00	.80000-02	1298.0	.2176	.2903	.3422	.9273	.1753-01	.1115-01	1.665	12.67	598.7
181	180.00	.15000-01	1299.0	.1515	.1916	.2178	.9273	.1115-01	.7759-02	1.387	10.00	569.4
180	180.00	.25000-01	1300.0	.1312	.1704	.1971	.9273	.1009-01	.6712-02	1.091	7.558	585.6
181	180.00	.50000-01	1301.0	.1123	.1442	.1655	.9273	.8480-02	.5751-02	.9720	6.758	579.0
180	180.00	.75000-01	1302.0	.4810-01	.6080-01	.6910-01	.9273	.3539-02	.2459-02	.4390	3.014	569.9
181	180.00	.10000+00	1303.0	.8060-01	.1045	.1207	.9273	.6183-02	.4130-02	.6770	4.925	584.2
180	225.00	.98000	1425.0	.2048	.2648	.3076	.9263	.1574-01	.1048-01	1.728	12.58	583.3
180	225.00	.99400	1426.0	.1682	.2154	.2485	.9263	.1272-01	.8605-02	1.467	10.71	577.7
180	263.00	.13600	1336.0	.2490-01	.3050-01	.3480-01	.9220	.1782-02	.1275-02	.2620	1.946	542.8
181	263.00	.30000	1337.0	.3410-01	.4150-01	.4720-01	.9220	.2418-02	.1746-02	.3670	2.780	538.0
181	263.00	.40000	1473.0	.4010-01	.4900-01	.5590-01	.9220	.2865-02	.2056-02	.4250	3.158	541.5
181	263.00	.50000	1474.0	.2930-01	.3570-01	.4070-01	.9220	.2083-02	.1502-02	.3140	2.340	538.9
181	263.00	.60000	1475.0	.3250-01	.3950-01	.4500-01	.9220	.2307-02	.1663-02	.3480	2.589	539.0
181	263.00	.75000	1338.0	.3250-01	.3950-01	.4490-01	.9220	.2298-02	.1667-02	.3540	2.640	535.7
181	263.00	.81500	1339.0	.3380-01	.4080-01	.4620-01	.9220	.2366-02	.1731-02	.3760	2.815	530.6
181	263.00	.83700	1340.0	.3160-01	.3820-01	.4330-01	.9220	.2217-02	.1621-02	.3520	2.628	531.1
181	263.00	.88400	1341.0	.3210-01	.3890-01	.4410-01	.9220	.2257-02	.1645-02	.3540	2.642	533.0
181	263.00	.89400	1342.0	.3410-01	.4140-01	.4690-01	.9220	.2403-02	.1748-02	.3740	2.794	534.0
181	263.00	.90700	1343.0	.3770-01	.4580-01	.5210-01	.9220	.2670-02	.1931-02	.4070	3.032	537.3
181	263.00	.92800	1477.0	.4300-01	.5240-01	.5980-01	.9220	.3061-02	.2200-02	.4570	3.396	540.6
180	263.00	.93900	1344.0	.7000-01	.8630-01	.9930-01	.9220	.5084-02	.3580-02	.7070	5.229	550.9
181	270.00	.80000-02	1304.0	.1835	.2366	.2725	.9273	.1396-01	.9400-02	1.566	12.23	581.5
181	270.00	.50000-01	1306.0	.1011	.1305	.1503	.9273	.7701-02	.5178-02	.8600	5.966	582.0
180	270.00	.75000-01	1307.0	.4780-01	.6090-01	.6950-01	.9273	.3555-02	.2446-02	.4270	2.972	573.8
181	270.00	.10000+00	1308.0	.8730-01	.1136	.1317	.9273	.6746-02	.4470-02	.7210	5.240	586.8
180	270.00	.11500	1345.0	.8480-01	.1077	.1269	.9220	.6496-02	.4339-02	.7620	5.582	572.5
180	277.00	.13600	1346.0	.2520-01	.3070-01	.3510-01	.9220	.1795-02	.1288-02	.2660	1.976	541.7
180	277.00	.30000	1347.0	.3220-01	.3930-01	.4490-01	.9220	.2300-02	.1646-02	.3380	2.551	543.1
181	277.00	.40000	1464.0	.2670-01	.3250-01	.3700-01	.9220	.1898-02	.1366-02	.2850	2.119	539.7
181	277.00	.60000	1466.0	.3010-01	.3660-01	.4170-01	.9220	.2137-02	.1541-02	.3230	2.402	538.8
181	277.00	.70000	1467.0	.3410-01	.4170-01	.4770-01	.9220	.2443-02	.1749-02	.3590	2.671	542.6
180	277.00	.75000	1348.0	.3590-01	.4390-01	.5020-01	.9220	.2567-02	.1837-02	.3770	2.803	542.9
180	277.00	.81500	1349.0	.3920-01	.4780-01	.5440-01	.9220	.2786-02	.2006-02	.4180	3.110	539.8
180	277.00	.83700	1350.0	.3710-01	.4520-01	.5150-01	.9220	.2633-02	.1897-02	.3960	2.945	539.6
180	277.00	.88400	1351.0	.3160-01	.3850-01	.4380-01	.9220	.2243-02	.1619-02	.3400	2.529	538.4
180	277.00	.89400	1352.0	.3520-01	.4290-01	.4890-01	.9220	.2504-02	.1802-02	.3750	2.789	540.1
181	277.00	.90000	1468.0	.3450-01	.4180-01	.4740-01	.9220	.2429-02	.1765-02	.3770	2.814	534.5
181	277.00	.90700	1353.0	.3540-01	.4290-01	.4870-01	.9220	.2497-02	.1813-02	.3870	2.884	534.9
181	277.00	.92100	1469.0	.3700-01	.4500-01	.5120-01	.9220	.2623-02	.1896-02	.3990	2.975	537.5
181	277.00	.92800	1470.0	.3810-01	.4650-01	.5290-01	.9220	.2711-02	.1954-02	.4080	3.037	539.3

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, RIGHT SRB CLEAN,

(RVZR58)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
181	277.00	.93700	1471.0	.4010-01	.4890-01	.5580-01	.9220	.2860-02	.2054-02	.4250	3.161	541.1
180	277.00	.93900	1354.0	.5900-01	.7290-01	.8400-01	.9220	.4297-02	.3019-02	.5930	4.383	551.9
181	335.00	.11000	1309.0	.1776	.2282	.2503	.9345	.1282-01	.9096-02	1.532	11.18	579.7
180	337.50	.74000	1355.0	.4870-01	.5960-01	.6800-01	.9222	.3479-02	.2494-02	.5130	3.812	542.6
180	337.50	.75000	1356.0	.4600-01	.5610-01	.6390-01	.9222	.3270-02	.2352-02	.4870	3.683	541.1
181	337.50	.76500	1357.0	.4520-01	.5470-01	.6200-01	.9223	.3177-02	.2315-02	.4960	3.768	533.7
181	337.50	.92500	1359.0	.4380-01	.5310-01	.6010-01	.9223	.3081-02	.2244-02	.4800	3.585	534.0
181	337.50	.93200	1360.0	.4800-01	.5830-01	.6620-01	.9223	.3391-02	.2460-02	.5220	3.888	536.1
181	337.50	.93900	1361.0	.5490-01	.6700-01	.7640-01	.9223	.3913-02	.2812-02	.5810	4.324	541.3

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR59)

RIGHT SRB

PARAMETRIC DATA

ALPHA = -5.000 BETA = .0000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
176	-4.970	.0000	4.020	73.00	747.0	176.6	.4680	5.296	2618.	.2224-03	.1422-06	4.095
177	-5.030	.0000	4.020	72.90	747.0	176.6	.4670	5.287	2618.	.2221-03	.1422-06	4.089

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
176	.5124-01	.1137-01
177	.5119-01	.1137-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
177	.00000	.80000-02	1310.0	.2932	.3654	.3886	.9379	.1989-01	.1501-01	2.839	21.88	558.1
176	.00000	.25000-01	1311.0	.2610	.3266	.3480	.9378	.1783-01	.1337-01	2.486	18.00	561.5
176	.00000	.83700	1364.0	.5360-01	.6670-01	.7680-01	.9228	.3937-02	.2746-02	.5240	3.865	556.7
176	.00000	.88400	1365.0	.6150-01	.7630-01	.8790-01	.9228	.4501-02	.3150-02	.6050	4.471	555.2
176	.00000	.90700	1366.0	.6110-01	.7610-01	.8790-01	.9228	.4502-02	.3129-02	.5920	4.365	558.2
176	5.0000	.75000-01	1313.0	.1801	.2240	.2382	.9378	.1220-01	.9227-02	1.759	12.56	556.8
176	5.0000	.11000	1314.0	.4370-01	.5320-01	.5610-01	.9378	.2876-02	.2241-02	.4720	3.515	536.9
176	15.600	.95300	1431.0	.1201	.1608	.1746	.9384	.8944-02	.6152-02	.9070	6.550	600.0
176	20.000	.75000-01	1316.0	.1903	.2381	.2541	.9374	.1302-01	.9749-02	1.815	12.93	561.2
176	20.000	.10000+00	1318.0	.2373	.2989	.3198	.9374	.1639-01	.1216-01	2.203	16.17	566.2
176	20.000	.11000	1319.0	.2367	.2981	.3189	.9374	.1634-01	.1213-01	2.202	16.17	565.8
176	20.000	.95300	1432.0	.1141	.1510	.1634	.9383	.8373-02	.5847-02	.8940	6.475	594.5
177	22.500	.72400	1367.0	.6610-01	.8190-01	.9410-01	.9227	.4818-02	.3383-02	.6560	4.931	553.4
176	22.500	.74000	1368.0	.6310-01	.7850-01	.9060-01	.9227	.4640-02	.3234-02	.6170	4.550	556.7
176	22.500	.75000	1369.0	.6570-01	.8170-01	.9420-01	.9227	.4825-02	.3367-02	.6440	4.753	556.2
177	22.500	.76500	1370.0	.6280-01	.7750-01	.8880-01	.9227	.4546-02	.3216-02	.6350	4.780	549.9
177	22.500	.77100	1371.0	.6350-01	.7830-01	.8980-01	.9227	.4596-02	.3251-02	.6410	4.748	550.0
176	22.500	.92500	1372.0	.6050-01	.7500-01	.8630-01	.9227	.4422-02	.3101-02	.6000	4.434	553.9
176	22.500	.93900	1374.0	.8050-01	.1005	.1162	.9227	.5953-02	.4126-02	.7760	5.721	559.2
176	24.400	.95300	1433.0	.1317	.1750	.1899	.9381	.9728-02	.6748-02	1.019	7.376	596.3

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR59)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
176	35.000	.75000-01	1321.0	.1945	.2431	.2605	.9366	.1334-01	.9965-02	1.864	13.28	560.4
176	35.000	.11000	1322.0	.2173	.2736	.2939	.9366	.1506-01	.1113-01	2.021	15.10	565.8
176	35.600	.95300	1434.0	.1544	.2017	.2185	.9374	.1119-01	.7910-02	1.261	9.162	588.0
176	40.000	.95300	1435.0	.1630	.2117	.2293	.9371	.1175-01	.8349-02	1.356	9.868	585.0
176	45.000	.74000	1375.0	.6000-01	.7420-01	.8530-01	.9224	.4373-02	.3076-02	.6020	4.527	551.8
176	45.000	.75000	1376.0	.6140-01	.7590-01	.8720-01	.9224	.4466-02	.3148-02	.6180	4.654	550.9
177	45.000	.76500	1377.0	.5930-01	.7280-01	.8320-01	.9224	.4260-02	.3036-02	.6120	4.543	545.6
177	45.000	.77100	1378.0	.5850-01	.7180-01	.8200-01	.9224	.4200-02	.2997-02	.6060	4.501	545.0
177	45.000	.88400	1381.0	.5900-01	.7180-01	.8160-01	.9224	.4179-02	.3018-02	.6300	4.689	538.7
177	45.000	.90700	1382.0	.6050-01	.7380-01	.8400-01	.9224	.4301-02	.3097-02	.6410	4.771	540.3
176	65.000	.11000	1323.0	.1906	.2398	.2610	.9342	.1337-01	.9765-02	1.780	12.87	565.1
176	67.500	.74000	1383.0	.5420-01	.6670-01	.7660-01	.9221	.3923-02	.2778-02	.5540	4.174	548.0
176	67.500	.75000	1384.0	.5150-01	.6350-01	.7290-01	.9221	.3737-02	.2638-02	.5220	3.933	549.5
177	67.500	.77100	1385.0	.5100-01	.6250-01	.7140-01	.9221	.3657-02	.2610-02	.5310	3.942	544.0
176	76.000	.10000+00	1324.0	.1908	.2401	.2628	.9332	.1347-01	.9776-02	1.781	13.09	565.2
176	76.000	.14100	1386.0	.3030-01	.3690-01	.4200-01	.9221	.2154-02	.1550-02	.3220	2.396	539.7
176	76.000	.14800	1387.0	.2790-01	.3400-01	.3870-01	.9221	.1982-02	.1428-02	.2980	2.215	539.0
176	76.000	.15500	1388.0	.2470-01	.3010-01	.3430-01	.9221	.1757-02	.1263-02	.2620	1.948	540.1
176	76.000	.16200	1389.0	.2400-01	.2930-01	.3340-01	.9221	.1713-02	.1230-02	.2540	1.889	540.8
176	76.000	.25000	1390.0	.4280-01	.5240-01	.5990-01	.9221	.3069-02	.2191-02	.4470	3.373	543.6
176	77.500	.95300	1436.0	.1321	.1693	.1863	.9338	.9543-02	.6769-02	1.152	8.412	577.2
176	77.500	.96700	1437.0	.1387	.1790	.1975	.9338	.1012-01	.7108-02	1.181	8.610	581.2
176	77.500	.99400	1439.0	.1526	.1993	.2211	.9338	.1133-01	.7820-02	1.248	9.069	587.8
177	90.000	.15000-01	1325.0	.1751	.2161	.2361	.9319	.1209-01	.8965-02	1.766	13.29	550.3
176	90.000	.25000-01	1326.0	.1422	.1788	.1972	.9319	.1010-01	.7284-02	1.328	9.597	565.1
177	90.000	.40000-01	1327.0	.1469	.1828	.2005	.9319	.1027-01	.7518-02	1.429	10.54	557.2
176	90.000	.60000-01	1328.0	.1863	.2341	.2580	.9319	.1322-01	.9545-02	1.747	12.04	564.4
176	90.000	.75000-01	1329.0	.1408	.1754	.1926	.9319	.9868-02	.7212-02	1.364	9.280	558.3
177	90.000	.13230	1479.0	.6580-01	.8050-01	.9200-01	.9220	.4710-02	.3370-02	.6910	5.133	542.4
177	90.000	.13390	1480.0	.4690-01	.5710-01	.6510-01	.9220	.3331-02	.2403-02	.5020	3.743	538.2
177	90.000	.13560	1481.0	.3550-01	.4310-01	.4900-01	.9220	.2506-02	.1818-02	.3860	2.878	535.1
177	90.000	.13730	1482.0	.2660-01	.3230-01	.3670-01	.9220	.1877-02	.1361-02	.2890	2.156	535.0
177	90.000	.13890	1483.0	.2670-01	.3230-01	.3670-01	.9220	.1879-02	.1365-02	.2910	2.171	534.2
177	90.000	.55000	1391.0	.4390-01	.5370-01	.6130-01	.9220	.3140-02	.2247-02	.4610	3.424	542.3
177	90.000	.65000	1392.0	.4150-01	.5100-01	.5840-01	.9220	.2988-02	.2126-02	.4300	3.188	545.2
176	90.000	.74000	1393.0	.4300-02	.5200-02	.5900-02	.9220	.3018-03	.2183-03	.4600-01	.3490	536.6
176	90.000	.76500	1394.0	.4730-01	.5830-01	.6710-01	.9220	.3440-02	.2421-02	.4770	3.529	550.5
176	90.000	.77100	1395.0	.4740-01	.5850-01	.6730-01	.9220	.3447-02	.2429-02	.4790	3.549	550.0
176	90.000	.81500	1396.0	.4790-01	.5900-01	.6790-01	.9220	.3478-02	.2453-02	.4850	3.655	549.6
176	90.000	.83700	1397.0	.4730-01	.5820-01	.6690-01	.9220	.3430-02	.2421-02	.4800	3.554	549.2
176	90.000	.88400	1398.0	.3830-01	.4690-01	.5370-01	.9220	.2753-02	.1960-02	.3970	2.945	545.0
176	90.000	.89400	1399.0	.5080-01	.6210-01	.7090-01	.9220	.3632-02	.2600-02	.5340	3.966	542.2
176	90.000	.90700	1400.0	.3890-01	.4790-01	.5490-01	.9220	.2815-02	.1995-02	.3990	2.959	547.3

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR59)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
176	90.000	.91700	1401.0	.3870-01	.4760-01	.5470-01	.9220	.2802-02	.1983-02	.3950	2.931	548.0
176	90.000	.93200	1402.0	.4670-01	.5760-01	.6630-01	.9220	.3397-02	.2391-02	.4710	3.484	550.6
176	90.000	.93900	1403.0	.5370-01	.6670-01	.7720-01	.9220	.3955-02	.2751-02	.5270	3.889	555.9
177	95.000	.13560	1484.0	.3420-01	.4160-01	.4740-01	.9220	.2425-02	.1753-02	.3690	2.748	537.0
177	95.000	.13890	1486.0	.2450-01	.2980-01	.3390-01	.9220	.1734-02	.1254-02	.2640	1.970	536.6
177	95.000	.14560	1487.0	.2300-01	.2800-01	.3180-01	.9220	.1627-02	.1178-02	.2480	1.851	536.4
177	95.000	.14730	1488.0	.1900-01	.2300-01	.2620-01	.9220	.1340-02	.9703-03	.2050	1.527	536.2
176	104.00	.10000+00	1330.0	.1569	.1983	.2207	.9307	.1131-01	.8041-02	1.442	10.58	568.1
176	104.00	.12000	1404.0	.5300-01	.6500-01	.7430-01	.9220	.3809-02	.2717-02	.5520	4.101	544.1
176	104.00	.12700	1405.0	.8530-01	.1067	.1235	.9220	.6328-02	.4401-02	.8430	6.221	555.9
176	104.00	.13400	1406.0	.3330-01	.4070-01	.4640-01	.9220	.2380-02	.1708-02	.3530	2.625	540.8
176	104.00	.14100	1407.0	.2830-01	.3450-01	.3940-01	.9220	.2016-02	.1450-02	.3010	2.242	539.7
176	104.00	.14800	1408.0	.2140-01	.2610-01	.2980-01	.9220	.1528-02	.1097-02	.2270	1.688	540.6
176	104.00	.15500	1409.0	.2210-01	.2690-01	.3080-01	.9220	.1576-02	.1130-02	.2330	1.730	541.4
176	104.00	.16200	1410.0	.2080-01	.2540-01	.2900-01	.9220	.1484-02	.1063-02	.2190	1.627	541.6
176	104.00	.17300	1411.0	.1900-01	.2330-01	.2670-01	.9220	.1366-02	.9739-03	.1980	1.469	544.3
176	104.00	.18000	1412.0	.1810-01	.2220-01	.2550-01	.9220	.1304-02	.9282-03	.1880	1.393	545.2
176	104.00	.18600	1413.0	.1810-01	.2220-01	.2540-01	.9220	.1303-02	.9261-03	.1870	1.386	545.8
176	104.00	.19300	1414.0	.2050-01	.2520-01	.2890-01	.9220	.1479-02	.1051-02	.2110	1.569	546.1
176	104.00	.20000	1415.0	.2160-01	.2660-01	.3050-01	.9220	.1563-02	.1108-02	.2220	1.643	547.3
176	104.00	.25000	1416.0	.4350-01	.5370-01	.6190-01	.9220	.3171-02	.2229-02	.4380	3.292	551.1
177	112.00	.13560	1489.0	.3200-01	.3900-01	.4450-01	.9220	.2276-02	.1639-02	.3410	2.541	539.1
177	112.00	.13730	1490.0	.2640-01	.3220-01	.3670-01	.9220	.1877-02	.1351-02	.2810	2.093	539.2
177	112.00	.13890	1491.0	.2380-01	.2900-01	.3310-01	.9220	.1694-02	.1219-02	.2530	1.886	539.4
177	112.00	.14560	1492.0	.5500-02	.6700-02	.7500-02	.9220	.3864-03	.2816-03	.6100-01	.4520	532.3
177	112.00	.14730	1493.0	.1400-01	.1710-01	.1950-01	.9220	.9977-03	.7175-03	.1490	1.108	539.8
176	112.50	.74000	1417.0	.3920-01	.4860-01	.5620-01	.9220	.2881-02	.2007-02	.3860	2.848	555.2
176	112.50	.75000	1418.0	.4010-01	.4970-01	.5740-01	.9220	.2943-02	.2053-02	.3960	2.923	554.7
177	112.50	.77100	1419.0	.3930-01	.4830-01	.5550-01	.9220	.2839-02	.2011-02	.4020	3.029	547.5
176	112.50	.92500	1420.0	.3500-01	.4320-01	.4970-01	.9220	.2546-02	.1791-02	.3520	2.607	550.8
176	112.50	.93200	1421.0	.3740-01	.4630-01	.5330-01	.9220	.2732-02	.1917-02	.3750	2.771	552.0
176	112.50	.93900	1422.0	.6060-01	.7530-01	.8710-01	.9220	.4464-02	.3104-02	.5940	4.385	556.0
176	112.50	.95300	1440.0	.6800-01	.8820-01	.9960-01	.9307	.5105-02	.3484-02	.5690	4.140	584.2
177	112.50	.96700	1441.0	.1107	.1435	.1620	.9306	.8295-02	.5668-02	.9280	6.756	583.6
177	112.50	.99400	1443.0	.9940-01	.1309	.1492	.9306	.7640-02	.5086-02	.7890	5.717	592.2
177	135.00	.80000-02	1331.0	.2137	.2695	.3035	.9285	.1553-01	.1094-01	1.976	15.27	566.7
176	135.00	.25000-01	1332.0	.9380-01	.1185	.1336	.9286	.6843-02	.4807-02	.8630	6.330	567.9
177	135.00	.50000-01	1333.0	.1020	.1279	.1435	.9285	.7347-02	.5224-02	.9660	7.104	562.5
176	135.00	.75000-01	1334.0	.7080-01	.8890-01	.9980-01	.9286	.5114-02	.3628-02	.6670	4.987	563.6
176	135.00	.10000+00	1335.0	.1324	.1690	.1916	.9286	.9819-02	.6786-02	1.173	8.576	574.6
176	135.00	.40000	1423.0	.3820-01	.4790-01	.5580-01	.9220	.2857-02	.1958-02	.3630	2.716	562.1
177	135.00	.92500	1424.0	.3570-01	.4430-01	.5130-01	.9220	.2624-02	.1828-02	.3510	2.593	555.2
177	140.00	.13560	1494.0	.2950-01	.3620-01	.4140-01	.9220	.2120-02	.1511-02	.3060	2.273	544.6

IH72, RIGHT SRB CLEAN,

HU/HREF

(RVZR59)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
177	140.00	.13730	1495.0	.2390-01	.2930-01	.3360-01	.9220	.1720-02	.1222-02	.2460	1.828	545.7
177	140.00	.13890	1496.0	.1880-01	.2300-01	.2640-01	.9220	.1354-02	.9600-03	.1920	1.427	546.8
177	140.00	.14560	1497.0	.1400-01	.1720-01	.1970-01	.9220	.1010-02	.7162-03	.1430	1.064	547.0
177	150.00	.14230	1499.0	.1730-01	.2130-01	.2440-01	.9220	.1250-02	.8860-03	.1770	1.316	547.0
177	180.00	.80000-02	1298.0	.2282	.2910	.3326	.9273	.1703-01	.1168-01	2.022	15.57	574.2
177	180.00	.15000-01	1299.0	.1098	.1365	.1534	.9273	.7855-02	.5619-02	1.072	7.781	556.5
176	180.00	.25000-01	1300.0	.1048	.1303	.1464	.9274	.7499-02	.5370-02	1.027	7.219	556.2
177	180.00	.50000-01	1301.0	.1050	.1314	.1483	.9273	.7592-02	.5376-02	1.000	7.013	561.3
176	180.00	.75000-01	1302.0	.5760-01	.7260-01	.8230-01	.9274	.4218-02	.2952-02	.5340	3.674	566.6
177	180.00	.10000+00	1303.0	.1459	.1889	.2180	.9273	.1116-01	.7471-02	1.228	8.940	583.0
176	225.00	.98000	1425.0	.4660-01	.6270-01	.7320-01	.9292	.3751-02	.2389-02	.3480	2.513	601.6
176	225.00	.99400	1426.0	.3390-01	.4550-01	.5290-01	.9292	.2712-02	.1739-02	.2570	1.853	599.9
176	263.00	.13600	1336.0	.3310-01	.4040-01	.4600-01	.9220	.2357-02	.1698-02	.3540	2.638	538.8
177	263.00	.20000	1472.0	.3830-01	.4650-01	.5270-01	.9220	.2700-02	.1962-02	.4180	3.123	534.0
177	263.00	.30000	1337.0	.4830-01	.5880-01	.6710-01	.9220	.3434-02	.2471-02	.5140	3.891	539.3
177	263.00	.40000	1473.0	.4600-01	.5640-01	.6460-01	.9220	.3305-02	.2355-02	.4780	3.545	544.5
177	263.00	.50000	1474.0	.4160-01	.5090-01	.5820-01	.9220	.2978-02	.2129-02	.4350	3.233	542.9
177	263.00	.60000	1475.0	.4010-01	.4910-01	.5610-01	.9220	.2870-02	.2053-02	.4200	3.125	542.5
177	263.00	.75000	1338.0	.4880-01	.5940-01	.6760-01	.9220	.3459-02	.2499-02	.5250	3.911	537.3
177	263.00	.81500	1339.0	.4980-01	.6030-01	.6840-01	.9220	.3501-02	.2549-02	.5460	4.079	533.0
177	263.00	.83700	1340.0	.4500-01	.5450-01	.6190-01	.9220	.3168-02	.2302-02	.4910	3.667	533.9
177	263.00	.88400	1341.0	.4090-01	.4970-01	.5650-01	.9220	.2894-02	.2095-02	.4420	3.299	536.1
177	263.00	.89400	1342.0	.4130-01	.5020-01	.5710-01	.9220	.2922-02	.2112-02	.4440	3.311	537.0
177	263.00	.90700	1343.0	.3920-01	.4780-01	.5460-01	.9220	.2793-02	.2006-02	.4150	3.086	540.5
177	263.00	.92800	1477.0	.4490-01	.5500-01	.6280-01	.9220	.3216-02	.2299-02	.4700	3.489	543.0
176	263.00	.93900	1344.0	.7400-01	.9200-01	.1065	.9220	.5459-02	.3793-02	.7250	5.348	556.3
177	270.00	.80000-02	1304.0	.2196	.2726	.2987	.9319	.1529-01	.1124-01	2.158	17.07	555.3
177	270.00	.50000-01	1306.0	.1897	.2358	.2586	.9319	.1324-01	.9711-02	1.855	13.04	556.3
176	270.00	.75000-01	1307.0	.1448	.1803	.1979	.9319	.1014-01	.7421-02	1.409	9.899	557.5
177	270.00	.10000+00	1308.0	.1802	.2260	.2490	.9319	.1275-01	.9222-02	1.698	12.49	563.2
176	270.00	.11500	1345.0	.1233	.1566	.1845	.9220	.9455-02	.6320-02	1.111	8.138	571.6
176	277.00	.13600	1346.0	.3460-01	.4210-01	.4790-01	.9220	.2455-02	.1771-02	.3710	2.762	538.0
176	277.00	.30000	1347.0	.5370-01	.6570-01	.7510-01	.9220	.3849-02	.2752-02	.5630	4.256	542.8
177	277.00	.40000	1464.0	.4710-01	.5770-01	.6590-01	.9220	.3372-02	.2414-02	.4950	3.677	542.3
177	277.00	.60000	1466.0	.4900-01	.5980-01	.6820-01	.9220	.3490-02	.2511-02	.5210	3.881	539.6
177	277.00	.70000	1467.0	.4530-01	.5530-01	.6320-01	.9220	.3234-02	.2318-02	.4770	3.547	541.5
176	277.00	.75000	1348.0	.4590-01	.5610-01	.6410-01	.9220	.3286-02	.2353-02	.4840	3.594	541.9
176	277.00	.81500	1349.0	.4620-01	.5640-01	.6430-01	.9220	.3296-02	.2367-02	.4890	3.639	540.7
176	277.00	.83700	1350.0	.4580-01	.5590-01	.6380-01	.9220	.3267-02	.2345-02	.4840	3.603	540.9
176	277.00	.88400	1351.0	.4320-01	.5270-01	.6010-01	.9220	.3077-02	.2212-02	.4590	3.413	540.0
176	277.00	.89400	1352.0	.4340-01	.5310-01	.6070-01	.9220	.3108-02	.2225-02	.4570	3.395	542.2
177	277.00	.90000	1468.0	.4520-01	.5490-01	.6240-01	.9220	.3195-02	.2315-02	.4890	3.650	535.8
177	277.00	.90700	1353.0	.4570-01	.5550-01	.6310-01	.9220	.3230-02	.2338-02	.4930	3.678	536.3

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR59)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
177	277.00	.92100	1469.0	.4520-01	.5510-01	.6270-01	.9220	.3212-02	.2316-02	.4840	3.602	538.4
177	277.00	.92800	1470.0	.4870-01	.5940-01	.6770-01	.9220	.3466-02	.2491-02	.5160	3.840	540.1
177	277.00	.93700	1471.0	.5110-01	.6240-01	.7130-01	.9220	.3650-02	.2615-02	.5370	3.994	541.8
176	277.00	.93900	1354.0	.6140-01	.7640-01	.8840-01	.9220	.4529-02	.3147-02	.6010	4.437	556.4
177	335.00	.11000	1309.0	.2387	.2985	.3189	.9373	.1632-01	.1222-01	2.280	16.79	560.7
176	337.50	.74000	1355.0	.7020-01	.8700-01	.1001	.9227	.5127-02	.3595-02	.6950	5.136	554.0
176	337.50	.75000	1356.0	.6830-01	.8450-01	.9700-01	.9227	.4972-02	.3497-02	.6810	5.122	552.6
177	337.50	.76500	1357.0	.6630-01	.8150-01	.9310-01	.9227	.4765-02	.3396-02	.6830	5.151	546.2
177	337.50	.92500	1359.0	.6780-01	.8320-01	.9500-01	.9227	.4863-02	.3468-02	.6990	5.182	545.9
177	337.50	.93200	1360.0	.7120-01	.8760-01	.1001	.9227	.5126-02	.3643-02	.7270	5.389	547.7
177	337.50	.93900	1361.0	.8920-01	.1105	.1270	.9227	.6503-02	.4565-02	.8850	6.539	553.5

PARAMETRIC DATA

ALPHA = -5.000 BETA = 5.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
178	-5.020	5.000	4.020	73.00	748.0	176.7	.4680	5.295	2618.	.2223-03	.1422-06	4.091
179	-5.050	5.000	4.020	72.90	748.0	176.7	.4670	5.286	2618.	.2219-03	.1423-06	4.084

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
178	.5123-01	.1137-01
179	.5119-01	.1138-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
179	.00000	.80000-02	1310.0	.2837	.3577	.3820	.9378	.1956-01	.1452-01	2.625	20.14	567.1
178	.00000	.25000-01	1311.0	.2532	.3214	.3440	.9377	.1763-01	.1297-01	2.288	16.49	571.3
178	.00000	.83700	1364.0	.4990-01	.6130-01	.7000-01	.9228	.3584-02	.2558-02	.5160	3.827	546.1
178	.00000	.88400	1365.0	.5770-01	.7080-01	.8070-01	.9228	.4132-02	.2957-02	.6000	4.454	544.8
178	.00000	.90700	1366.0	.5790-01	.7140-01	.8170-01	.9228	.4188-02	.2966-02	.5870	4.345	549.9
178	5.0000	.75000-01	1313.0	.1654	.2049	.2183	.9372	.1118-01	.8472-02	1.642	11.74	553.9
178	5.0000	.11000	1314.0	.6520-01	.7890-01	.8330-01	.9372	.4270-02	.3342-02	.7230	5.402	531.5
178	15.600	.95300	1431.0	.1590	.2043	.2211	.9366	.1133-01	.8146-02	1.374	10.03	579.0
178	20.000	.75000-01	1316.0	.1603	.1999	.2156	.9352	.1105-01	.8211-02	1.550	11.05	559.0
178	20.000	.10000+00	1318.0	.2008	.2533	.2746	.9352	.1407-01	.1029-01	1.854	13.61	567.5
178	20.000	.11000	1319.0	.2019	.2552	.2768	.9352	.1418-01	.1035-01	1.853	13.59	568.6
178	20.000	.95300	1432.0	.1113	.1427	.1549	.9360	.7936-02	.5700-02	.9680	7.070	577.9
179	22.500	.72400	1367.0	.4660-01	.5720-01	.6560-01	.9223	.3356-02	.2385-02	.4800	3.617	546.8
178	22.500	.74000	1368.0	.4170-01	.5130-01	.5880-01	.9222	.3014-02	.2137-02	.4270	3.161	548.1
178	22.500	.75000	1369.0	.4680-01	.5750-01	.6590-01	.9222	.3376-02	.2396-02	.4800	3.557	547.5
179	22.500	.76500	1370.0	.4530-01	.5540-01	.6330-01	.9223	.3241-02	.2317-02	.4720	3.567	544.0
179	22.500	.77100	1371.0	.4460-01	.5450-01	.6230-01	.9223	.3190-02	.2281-02	.4650	3.456	543.8
178	22.500	.92500	1372.0	.4270-01	.5240-01	.5990-01	.9222	.3066-02	.2189-02	.4450	3.300	544.6
178	22.500	.93900	1374.0	.4680-01	.5800-01	.6670-01	.9222	.3420-02	.2400-02	.4680	3.459	552.8
178	24.400	.95300	1433.0	.1293	.1664	.1816	.9354	.9306-02	.6626-02	1.111	8.106	580.0

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR60)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
178	35.000	.75000-01	1321.0	.1461	.1821	.1986	.9332	.1018-01	.7485-02	1.414	10.08	558.8
178	35.000	.11000	1322.0	.1700	.2148	.2357	.9332	.1207-01	.8708-02	1.561	11.65	568.4
178	35.600	.95300	1434.0	.1219	.1575	.1738	.9338	.8907-02	.6247-02	1.035	7.544	582.0
178	40.000	.95300	1435.0	.1145	.1485	.1650	.9332	.8453-02	.5864-02	.9560	6.958	584.7
178	45.000	.74000	1375.0	.3590-01	.4430-01	.5100-01	.9220	.2610-02	.1841-02	.3650	2.746	549.7
178	45.000	.75000	1376.0	.3670-01	.4520-01	.5190-01	.9220	.2660-02	.1880-02	.3740	2.815	548.9
179	45.000	.76500	1377.0	.3530-01	.4330-01	.4970-01	.9220	.2545-02	.1805-02	.3620	2.687	547.1
179	45.000	.77100	1378.0	.3460-01	.4250-01	.4870-01	.9220	.2494-02	.1773-02	.3580	2.652	546.1
179	45.000	.88400	1381.0	.3860-01	.4720-01	.5380-01	.9220	.2754-02	.1978-02	.4100	3.047	540.7
179	45.000	.90700	1382.0	.4220-01	.5160-01	.5900-01	.9220	.3020-02	.2162-02	.4440	3.300	542.5
178	65.000	.11000	1323.0	.1297	.1637	.1835	.9295	.9401-02	.6645-02	1.195	8.626	567.9
178	67.500	.74000	1383.0	.3190-01	.3960-01	.4580-01	.9220	.2347-02	.1637-02	.3150	2.369	555.0
178	67.500	.75000	1384.0	.3020-01	.3750-01	.4340-01	.9220	.2224-02	.1549-02	.2980	2.234	555.6
179	67.500	.77100	1385.0	.2800-01	.3470-01	.4010-01	.9220	.2054-02	.1434-02	.2770	2.046	554.7
178	76.000	.10000+00	1324.0	.1170	.1478	.1667	.9284	.8542-02	.5996-02	1.077	7.904	568.1
178	76.000	.14100	1386.0	.2120-01	.2570-01	.2930-01	.9220	.1500-02	.1084-02	.2280	1.696	537.6
178	76.000	.14800	1387.0	.1630-01	.1990-01	.2260-01	.9220	.1157-02	.8363-03	.1760	1.311	537.3
178	76.000	.15500	1388.0	.1410-01	.1710-01	.1950-01	.9220	.9977-03	.7215-03	.1520	1.132	537.1
178	76.000	.16200	1389.0	.1310-01	.1590-01	.1810-01	.9220	.9271-03	.6706-03	.1410	1.054	536.9
178	76.000	.25000	1390.0	.2440-01	.2970-01	.3380-01	.9220	.1731-02	.1251-02	.2630	1.992	537.6
178	77.500	.95300	1436.0	.5840-01	.7760-01	.9010-01	.9289	.4617-02	.2994-02	.4530	3.278	596.4
178	77.500	.96700	1437.0	.7190-01	.9680-01	.1134	.9289	.5811-02	.3683-02	.5350	3.859	602.5
178	77.500	.99400	1439.0	.5600-01	.7530-01	.8810-01	.9289	.4514-02	.2868-02	.4190	3.020	601.8
179	90.000	.15000-01	1325.0	.1433	.1780	.2000	.9273	.1024-01	.7336-02	1.408	10.57	555.9
178	90.000	.25000-01	1326.0	.7730-01	.9860-01	.1127	.9273	.5776-02	.3959-02	.6840	4.919	575.0
179	90.000	.40000-01	1327.0	.1101	.1385	.1570	.9273	.8037-02	.5635-02	1.025	7.529	565.9
178	90.000	.60000-01	1328.0	.1198	.1513	.1718	.9273	.8802-02	.6139-02	1.103	7.585	568.1
178	90.000	.75000-01	1329.0	.6260-01	.7780-01	.8750-01	.9273	.4483-02	.3207-02	.6120	4.168	556.9
179	90.000	.13230	1479.0	.5700-01	.6970-01	.7960-01	.9220	.4074-02	.2916-02	.5980	4.443	542.7
179	90.000	.13390	1480.0	.4170-01	.5070-01	.5770-01	.9220	.2956-02	.2132-02	.4460	3.325	538.4
179	90.000	.13560	1481.0	.2960-01	.3590-01	.4080-01	.9220	.2088-02	.1515-02	.3220	2.402	535.3
179	90.000	.13730	1482.0	.2400-01	.2920-01	.3320-01	.9220	.1699-02	.1230-02	.2600	1.939	536.4
179	90.000	.13890	1483.0	.1920-01	.2320-01	.2640-01	.9220	.1351-02	.9807-03	.2090	1.555	535.2
179	90.000	.55000	1391.0	.3230-01	.3990-01	.4590-01	.9220	.2347-02	.1655-02	.3270	2.422	550.1
179	90.000	.65000	1392.0	.3280-01	.4080-01	.4730-01	.9220	.2421-02	.1681-02	.3210	2.366	557.0
178	90.000	.76500	1394.0	.3110-01	.3880-01	.4510-01	.9220	.2311-02	.1591-02	.2980	2.194	560.5
178	90.000	.77100	1395.0	.3410-01	.4260-01	.4940-01	.9220	.2533-02	.1749-02	.3290	2.427	559.4
178	90.000	.81500	1396.0	.3340-01	.4160-01	.4830-01	.9220	.2474-02	.1709-02	.3220	2.417	559.1
178	90.000	.83700	1397.0	.3110-01	.3880-01	.4500-01	.9220	.2305-02	.1595-02	.3020	2.225	558.5
178	90.000	.88400	1398.0	.1980-01	.2450-01	.2830-01	.9220	.1448-02	.1015-02	.1980	1.463	552.7
178	90.000	.89400	1399.0	.5440-01	.6710-01	.7710-01	.9220	.3949-02	.2788-02	.5530	4.098	549.3
178	90.000	.90700	1400.0	.2040-01	.2530-01	.2930-01	.9220	.1499-02	.1044-02	.2010	1.483	555.4
178	90.000	.91700	1401.0	.2140-01	.2660-01	.3080-01	.9220	.1577-02	.1097-02	.2100	1.552	556.1

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, RIGHT SRB CLEAN,

(RVZR60)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
178	90.000	.93200	1402.0	.2960-01	.3680-01	.4270-01	.9220	.2188-02	.1516-02	.2880	2.126	557.6
178	90.000	.93900	1403.0	.5110-01	.6410-01	.7480-01	.9220	.3832-02	.2618-02	.4820	3.542	563.7
179	95.000	.13560	1484.0	.3020-01	.3670-01	.4170-01	.9220	.2137-02	.1546-02	.3260	2.431	536.9
179	95.000	.13890	1486.0	.1940-01	.2360-01	.2680-01	.9220	.1370-02	.9941-03	.2110	1.577	535.1
179	95.000	.14560	1487.0	.1620-01	.1970-01	.2240-01	.9220	.1147-02	.8310-03	.1760	1.312	536.1
179	95.000	.14730	1488.0	.1280-01	.1560-01	.1770-01	.9220	.9057-03	.6572-03	.1400	1.042	535.2
178	104.00	.10000+00	1330.0	.9760-01	.1235	.1410	.9265	.7226-02	.4999-02	.8910	6.536	569.4
178	104.00	.12000	1404.0	.4800-01	.5850-01	.6670-01	.9220	.3417-02	.2457-02	.5100	3.796	540.1
178	104.00	.12700	1405.0	.7150-01	.8830-01	.1018	.9220	.5215-02	.3662-02	.7170	5.307	551.8
178	104.00	.13400	1406.0	.2850-01	.3460-01	.3940-01	.9220	.2017-02	.1460-02	.3080	2.297	536.6
178	104.00	.14100	1407.0	.2210-01	.2680-01	.3050-01	.9220	.1561-02	.1131-02	.2400	1.786	535.9
178	104.00	.14800	1408.0	.1560-01	.1890-01	.2150-01	.9220	.1103-02	.7987-03	.1690	1.259	536.3
178	104.00	.15500	1409.0	.1570-01	.1900-01	.2160-01	.9220	.1107-02	.8023-03	.1700	1.267	535.9
178	104.00	.16200	1410.0	.1440-01	.1750-01	.1990-01	.9220	.1018-02	.7381-03	.1570	1.169	535.5
178	104.00	.17300	1411.0	.1260-01	.1540-01	.1750-01	.9220	.8956-03	.6481-03	.1370	1.019	536.7
178	104.00	.18000	1412.0	.1000-01	.1220-01	.1380-01	.9220	.7089-03	.5122-03	.1080	.8020	537.5
178	104.00	.18600	1413.0	.9400-02	.1150-01	.1310-01	.9220	.6692-03	.4835-03	.1020	.7570	537.5
178	104.00	.19300	1414.0	.9400-02	.1140-01	.1290-01	.9220	.6631-03	.4795-03	.1010	.7530	537.1
178	104.00	.20000	1415.0	.8700-02	.1060-01	.1200-01	.9220	.6154-03	.4447-03	.9300-01	.6960	537.5
178	104.00	.25000	1416.0	.1270-01	.1540-01	.1750-01	.9220	.8974-03	.6491-03	.1370	1.037	537.0
179	112.00	.13560	1489.0	.3170-01	.3850-01	.4380-01	.9220	.2240-02	.1622-02	.3430	2.553	536.6
179	112.00	.13730	1490.0	.2760-01	.3350-01	.3810-01	.9220	.1952-02	.1413-02	.2980	2.225	536.6
179	112.00	.13890	1491.0	.2590-01	.3150-01	.3580-01	.9220	.1834-02	.1326-02	.2790	2.080	537.3
179	112.00	.14560	1492.0	.5600-02	.6700-02	.7600-02	.9220	.3895-03	.2842-03	.6100-01	.4580	532.0
179	112.00	.14730	1493.0	.1450-01	.1760-01	.2000-01	.9220	.1024-02	.7413-03	.1570	1.169	536.4
178	112.50	.74000	1417.0	.2750-01	.3460-01	.4040-01	.9220	.2070-02	.1410-02	.2580	1.892	565.0
178	112.50	.75000	1418.0	.2590-01	.3250-01	.3790-01	.9220	.1943-02	.1325-02	.2430	1.787	564.3
179	112.50	.77100	1419.0	.2610-01	.3270-01	.3800-01	.9220	.1946-02	.1336-02	.2480	1.860	561.8
178	112.50	.92500	1420.0	.3440-01	.4300-01	.5000-01	.9220	.2564-02	.1762-02	.3290	2.420	561.2
178	112.50	.93200	1421.0	.3880-01	.4860-01	.5670-01	.9220	.2904-02	.1989-02	.3680	2.707	562.7
178	112.50	.93900	1422.0	.6900-01	.8690-01	.1017	.9220	.5211-02	.3535-02	.6410	4.709	566.4
178	112.50	.95300	1440.0	.8390-01	.1147	.1383	.9267	.7088-02	.4300-02	.6000	4.312	608.3
179	112.50	.96700	1441.0	.1125	.1565	.1914	.9266	.9798-02	.5761-02	.7670	5.501	614.7
179	112.50	.99400	1443.0	.6460-01	.8880-01	.1076	.9266	.5508-02	.3308-02	.4540	3.265	610.5
179	135.00	.80000-02	1331.0	.1877	.2379	.2732	.9258	.1398-01	.9610-02	1.705	13.15	570.4
178	135.00	.25000-01	1332.0	.5980-01	.7620-01	.8780-01	.9258	.4498-02	.3065-02	.5340	3.906	573.6
179	135.00	.50000-01	1333.0	.7500-01	.9420-01	.1076	.9258	.5510-02	.3838-02	.7020	5.159	564.9
178	135.00	.75000-01	1334.0	.4720-01	.5890-01	.6690-01	.9258	.3430-02	.2416-02	.4530	3.397	560.1
178	135.00	.10000+00	1335.0	.8090-01	.1022	.1171	.9258	.6000-02	.4146-02	.7440	5.458	568.3
178	135.00	.40000	1423.0	.4200-01	.5230-01	.6060-01	.9220	.3105-02	.2152-02	.4090	3.067	557.7
179	135.00	.92500	1424.0	.7090-01	.8960-01	.1051	.9220	.5379-02	.3628-02	.6500	4.769	568.6
179	140.00	.13560	1494.0	.2960-01	.3600-01	.4100-01	.9220	.2097-02	.1514-02	.3180	2.368	537.9
179	140.00	.13730	1495.0	.2730-01	.3330-01	.3780-01	.9220	.1937-02	.1399-02	.2940	2.187	538.0

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, RIGHT SRB CLEAN, HU/HREF

(RVZR60)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
179	140.00	.13890	1496.0	.2000-01	.2430-01	.2770-01	.9220	.1417-02	.1021-02	.2130	1.587	539.1
179	140.00	.14560	1497.0	.1400-01	.1700-01	.1940-01	.9220	.9907-03	.7146-03	.1500	1.114	538.5
179	150.00	.14230	1499.0	.1850-01	.2260-01	.2570-01	.9220	.1315-02	.9488-03	.1990	1.482	538.2
179	180.00	.80000-02	1298.0	.2263	.2898	.3321	.9273	.1700-01	.1159-01	1.978	15.21	577.1
179	180.00	.15000-01	1299.0	.1141	.1415	.1589	.9273	.8135-02	.5840-02	1.126	8.179	555.0
178	180.00	.25000-01	1300.0	.1132	.1416	.1597	.9273	.8184-02	.5801-02	1.083	7.593	561.0
179	180.00	.50000-01	1301.0	.1114	.1393	.1573	.9273	.8050-02	.5700-02	1.062	7.445	561.5
178	180.00	.75000-01	1302.0	.4930-01	.6120-01	.6860-01	.9273	.3517-02	.2528-02	.4890	3.387	554.3
179	180.00	.10000+00	1303.0	.1067	.1353	.1542	.9273	.7893-02	.5461-02	.9640	7.062	571.3
178	225.00	.98000	1425.0	.1020	.1356	.1533	.9325	.7855-02	.5224-02	.7870	5.689	597.1
178	225.00	.99400	1426.0	.9490-01	.1263	.1429	.9325	.7321-02	.4860-02	.7290	5.273	597.7
178	263.00	.13600	1336.0	.4460-01	.5410-01	.6120-01	.9226	.3138-02	.2283-02	.4850	3.614	535.5
179	263.00	.20000	1472.0	.7610-01	.9290-01	.1058	.9226	.5415-02	.3894-02	.8020	5.964	541.8
179	263.00	.30000	1337.0	.7050-01	.8560-01	.9700-01	.9226	.4965-02	.3608-02	.7640	5.790	536.2
179	263.00	.40000	1473.0	.6290-01	.7690-01	.8760-01	.9226	.4485-02	.3220-02	.6610	4.909	542.7
179	263.00	.50000	1474.0	.6220-01	.7590-01	.8640-01	.9226	.4422-02	.3185-02	.6590	4.898	541.0
179	263.00	.60000	1475.0	.6060-01	.7380-01	.8390-01	.9226	.4296-02	.3100-02	.6440	4.795	540.0
179	263.00	.75000	1338.0	.6150-01	.7460-01	.8440-01	.9226	.4323-02	.3147-02	.6690	4.991	535.2
179	263.00	.81500	1339.0	.6180-01	.7470-01	.8440-01	.9226	.4319-02	.3161-02	.6820	5.097	532.0
179	263.00	.83700	1340.0	.5710-01	.6920-01	.7820-01	.9226	.4005-02	.2922-02	.6250	4.668	533.9
179	263.00	.88400	1341.0	.5370-01	.6510-01	.7370-01	.9226	.3775-02	.2749-02	.5850	4.367	534.9
179	263.00	.89400	1342.0	.5410-01	.6570-01	.7440-01	.9226	.3810-02	.2768-02	.5860	4.366	536.3
179	263.00	.90700	1343.0	.5230-01	.6370-01	.7240-01	.9226	.3705-02	.2677-02	.5580	4.155	539.3
179	263.00	.92800	1477.0	.5710-01	.6980-01	.7950-01	.9226	.4071-02	.2924-02	.6010	4.464	542.4
178	263.00	.93900	1344.0	.6540-01	.8100-01	.9320-01	.9226	.4773-02	.3351-02	.6510	4.812	553.5
179	270.00	.80000-02	1304.0	.2564	.3208	.3418	.9378	.1750-01	.1312-01	2.443	19.26	561.7
179	270.00	.50000-01	1306.0	.2473	.3108	.3316	.9378	.1697-01	.1266-01	2.319	16.23	564.7
178	270.00	.75000-01	1307.0	.1957	.2433	.2588	.9377	.1326-01	.1003-01	1.915	13.46	556.8
179	270.00	.10000+00	1308.0	.2261	.2869	.3070	.9378	.1572-01	.1158-01	2.045	14.98	571.2
178	270.00	.11500	1345.0	.1602	.2044	.2404	.9228	.1232-01	.8206-02	1.418	10.37	574.9
178	277.00	.13600	1346.0	.4970-01	.6040-01	.6840-01	.9230	.3503-02	.2545-02	.5360	3.992	537.3
178	277.00	.30000	1347.0	.7660-01	.9360-01	.1063	.9230	.5448-02	.3923-02	.8070	6.098	542.1
179	277.00	.40000	1464.0	.7120-01	.8740-01	.9950-01	.9230	.5094-02	.3647-02	.7390	5.485	545.2
179	277.00	.60000	1466.0	.7580-01	.9260-01	.1053	.9230	.5388-02	.3878-02	.7960	5.919	542.5
179	277.00	.70000	1467.0	.6870-01	.8420-01	.9590-01	.9230	.4910-02	.3515-02	.7120	5.286	545.2
178	277.00	.75000	1348.0	.7080-01	.8650-01	.9820-01	.9230	.5033-02	.3626-02	.7460	5.549	541.8
178	277.00	.81500	1349.0	.7190-01	.8760-01	.9930-01	.9230	.5088-02	.3684-02	.7690	5.722	539.1
178	277.00	.83700	1350.0	.6840-01	.8330-01	.9440-01	.9230	.4836-02	.3503-02	.7310	5.446	538.9
178	277.00	.88400	1351.0	.6240-01	.7600-01	.8610-01	.9230	.4413-02	.3199-02	.6700	4.986	538.4
178	277.00	.89400	1352.0	.6390-01	.7800-01	.8850-01	.9230	.4532-02	.3274-02	.6790	5.049	540.4
179	277.00	.90000	1468.0	.6360-01	.7760-01	.8810-01	.9230	.4510-02	.3256-02	.6740	5.015	540.8
179	277.00	.90700	1353.0	.6510-01	.7940-01	.9020-01	.9230	.4618-02	.3331-02	.6880	5.115	541.3
179	277.00	.92100	1469.0	.6530-01	.7990-01	.9080-01	.9230	.4649-02	.3343-02	.6850	5.091	542.9

IH72, RIGHT SRB CLEAN,

HU/HREF

(RVZR60)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
179	277.00	.92800	1470.0	.6930-01	.8490-01	.9660-01	.9230	.4947-02	.3545-02	.7200	5.348	544.6
179	277.00	.93700	1471.0	.7410-01	.9110-01	.1039	.9230	.5317-02	.3793-02	.7620	5.648	547.0
178	277.00	.93900	1354.0	.8230-01	.1024	.1180	.9230	.6044-02	.4216-02	.8020	5.919	557.4
179	335.00	.11000	1309.0	.2477	.3145	.3324	.9400	.1702-01	.1268-01	2.233	16.36	571.8
178	337.50	.74000	1355.0	.6810-01	.8460-01	.9700-01	.9234	.4970-02	.3490-02	.6710	4.956	555.4
178	337.50	.75000	1356.0	.6550-01	.8120-01	.9300-01	.9234	.4765-02	.3358-02	.6520	4.897	553.7
179	337.50	.76500	1357.0	.6840-01	.8440-01	.9630-01	.9234	.4929-02	.3503-02	.6930	5.218	550.0
179	337.50	.92500	1359.0	.7020-01	.8690-01	.9940-01	.9234	.5090-02	.3595-02	.7010	5.179	552.9
179	337.50	.93200	1360.0	.7330-01	.9090-01	.1042	.9234	.5337-02	.3751-02	.7230	5.340	555.1
179	337.50	.93900	1361.0	.8850-01	.1108	.1279	.9234	.6546-02	.4529-02	.8420	6.197	561.9

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR61)

RIGHT SRB

PARAMETRIC DATA

ALPHA = .0000 BETA = -5.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
168	.0000	-5.000	4.020	72.70	747.0	176.4	.4660	5.275	2616.	.2218-03	.1420-06	4.085
169	.0000	-5.000	4.020	72.60	750.0	177.2	.4660	5.269	2622.	.2205-03	.1427-06	4.053

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
168	.5113-01	.1138-01
169	.5113-01	.1142-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
169	.00000	.80000-02	1310.0	.2402	.3137	.3527	.9319	.1803-01	.1228-01	1.967	14.92	589.8
168	.00000	.25000-01	1311.0	.1568	.2011	.2240	.9319	.1145-01	.8018-02	1.359	9.760	577.2
168	.00000	.83700	1364.0	.4420-01	.5400-01	.6160-01	.9220	.3149-02	.2262-02	.4680	3.481	539.8
168	.00000	.88400	1365.0	.4700-01	.5740-01	.6550-01	.9220	.3349-02	.2405-02	.4970	3.696	540.1
168	.00000	.90700	1366.0	.4810-01	.5900-01	.6760-01	.9220	.3458-02	.2457-02	.4940	3.668	545.4
168	5.0000	.75000-01	1313.0	.1105	.1391	.1531	.9324	.7828-02	.5651-02	1.026	7.294	565.1
168	5.0000	.11000	1314.0	.2660-01	.3190-01	.3430-01	.9324	.1754-02	.1361-02	.3070	2.306	521.1
168	15.600	.95300	1431.0	.1307	.1717	.1906	.9341	.9747-02	.6683-02	1.045	7.586	590.2
168	20.000	.75000-01	1316.0	.1239	.1585	.1742	.9338	.8906-02	.6337-02	1.086	7.681	575.3
168	20.000	.10000+00	1318.0	.1569	.2032	.2247	.9338	.1149-01	.8020-02	1.314	9.567	582.8
168	20.000	.11000	1319.0	.1619	.2099	.2323	.9338	.1187-01	.8279-02	1.352	9.843	583.3
168	20.000	.95300	1432.0	.1120	.1471	.1628	.9345	.8326-02	.5725-02	.8960	6.499	590.2
169	22.500	.72400	1367.0	.4840-01	.5980-01	.6870-01	.9221	.3514-02	.2476-02	.4900	3.683	552.1
168	22.500	.74000	1368.0	.4740-01	.5860-01	.6740-01	.9221	.3448-02	.2422-02	.4730	3.500	551.2
168	22.500	.75000	1369.0	.4950-01	.6110-01	.7030-01	.9221	.3596-02	.2531-02	.4970	3.680	550.2
169	22.500	.76500	1370.0	.4620-01	.5700-01	.6540-01	.9221	.3345-02	.2364-02	.4710	3.544	550.7
169	22.500	.77100	1371.0	.4680-01	.5770-01	.6630-01	.9221	.3392-02	.2395-02	.4760	3.522	551.1
168	22.500	.92500	1372.0	.4850-01	.6010-01	.6940-01	.9221	.3547-02	.2481-02	.4800	3.549	553.1
168	22.500	.93900	1374.0	.6230-01	.7790-01	.9050-01	.9221	.4626-02	.3187-02	.5960	4.390	559.7
168	24.400	.95300	1433.0	.1084	.1454	.1621	.9350	.8289-02	.5542-02	.8120	5.863	600.1

IH72, RIGHT SRB CLEAN,

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
168	35.000	.75000-01	1321.0	.1368	.1766	.1933	.9351	.9885-02	.6996-02	1.159	8.180	580.9
168	35.000	.11000	1322.0	.1772	.2328	.2567	.9351	.1312-01	.9060-02	1.417	10.46	590.2
168	35.600	.95300	1434.0	.9510-01	.1306	.1459	.9360	.7457-02	.4862-02	.6680	4.799	609.3
168	40.000	.95300	1435.0	.8770-01	.1223	.1371	.9364	.7007-02	.4485-02	.5920	4.243	614.6
168	45.000	.74000	1375.0	.5580-01	.7010-01	.8170-01	.9224	.4176-02	.2855-02	.5230	3.909	563.5
168	45.000	.75000	1376.0	.5730-01	.7200-01	.8380-01	.9224	.4285-02	.2928-02	.5360	4.007	563.6
169	45.000	.76500	1377.0	.5180-01	.6520-01	.7600-01	.9224	.3886-02	.2647-02	.4830	3.547	567.3
169	45.000	.77100	1378.0	.5030-01	.6330-01	.7370-01	.9224	.3770-02	.2574-02	.4720	3.466	566.5
169	45.000	.88400	1381.0	.4980-01	.6260-01	.7290-01	.9224	.3727-02	.2546-02	.4670	3.433	566.3
169	45.000	.90700	1382.0	.5380-01	.6770-01	.7890-01	.9224	.4036-02	.2749-02	.5020	3.683	567.4
168	65.000	.11000	1323.0	.1819	.2426	.2652	.9372	.1356-01	.9298-02	1.387	9.867	597.4
168	67.500	.74000	1383.0	.6360-01	.8110-01	.9550-01	.9227	.4883-02	.3250-02	.5610	4.172	574.0
168	67.500	.75000	1384.0	.6250-01	.8000-01	.9460-01	.9227	.4835-02	.3193-02	.5430	4.033	576.6
169	67.500	.77100	1385.0	.5450-01	.7020-01	.8330-01	.9227	.4258-02	.2788-02	.4680	3.409	582.0
168	76.000	.10000+00	1324.0	.1724	.2314	.2528	.9376	.1293-01	.8816-02	1.292	9.327	600.1
168	76.000	.14100	1386.0	.3870-01	.4780-01	.5480-01	.9228	.2804-02	.1977-02	.3860	2.859	551.1
168	76.000	.14800	1387.0	.3630-01	.4480-01	.5140-01	.9228	.2626-02	.1854-02	.3640	2.692	550.5
168	76.000	.15500	1388.0	.3580-01	.4420-01	.5070-01	.9228	.2592-02	.1829-02	.3580	2.649	550.9
168	76.000	.16200	1389.0	.3680-01	.4550-01	.5230-01	.9228	.2674-02	.1881-02	.3660	2.704	552.2
168	76.000	.25000	1390.0	.5550-01	.6870-01	.7890-01	.9228	.4035-02	.2837-02	.5510	4.144	552.4
168	77.500	.95300	1436.0	.3380-01	.5050-01	.5700-01	.9385	.2914-02	.1728-02	.1950	1.384	633.9
168	77.500	.96700	1437.0	.6310-01	.9770-01	.1117	.9385	.5710-02	.3228-02	.3410	2.413	641.0
168	77.500	.99400	1439.0	.7380-01	.1101	.1242	.9385	.6348-02	.3774-02	.4270	3.036	633.4
169	90.000	.15000-01	1325.0	.1944	.2551	.2762	.9378	.1412-01	.9937-02	1.564	11.53	592.5
168	90.000	.25000-01	1326.0	.2084	.2816	.3080	.9378	.1575-01	.1065-01	1.529	10.85	603.1
169	90.000	.40000-01	1327.0	.2206	.2981	.3261	.9378	.1667-01	.1128-01	1.626	11.71	605.8
168	90.000	.60000-01	1328.0	.2402	.3247	.3552	.9378	.1816-01	.1228-01	1.762	11.91	603.1
168	90.000	.75000-01	1329.0	.1403	.1837	.1987	.9378	.1016-01	.7173-02	1.134	7.599	588.6
169	90.000	.13230	1479.0	.8890-01	.1113	.1290	.9228	.6596-02	.4546-02	.8470	6.225	563.7
169	90.000	.13390	1480.0	.6730-01	.8340-01	.9580-01	.9228	.4900-02	.3440-02	.6690	4.936	555.6
169	90.000	.13560	1481.0	.4980-01	.6140-01	.7030-01	.9228	.3594-02	.2545-02	.5050	3.732	551.6
169	90.000	.13730	1482.0	.4470-01	.5500-01	.6290-01	.9228	.3218-02	.2284-02	.4560	3.373	550.4
169	90.000	.13890	1483.0	.3720-01	.4580-01	.5230-01	.9228	.2676-02	.1901-02	.3800	2.811	550.1
169	90.000	.55000	1391.0	.7060-01	.8830-01	.1021	.9228	.5221-02	.3611-02	.6780	4.986	562.2
169	90.000	.65000	1392.0	.6480-01	.8120-01	.9430-01	.9228	.4821-02	.3311-02	.6120	4.494	565.2
168	90.000	.74000	1393.0	.5000-02	.6100-02	.6900-02	.9228	.3523-03	.2532-03	.5200-01	.3920	541.9
168	90.000	.76500	1394.0	.5600-01	.7260-01	.8670-01	.9228	.4432-02	.2861-02	.4650	3.386	584.0
168	90.000	.77100	1395.0	.5850-01	.7590-01	.9060-01	.9228	.4631-02	.2991-02	.4870	3.543	583.9
168	90.000	.81500	1396.0	.5600-01	.7350-01	.8860-01	.9228	.4530-02	.2864-02	.4490	3.313	589.9
168	90.000	.83700	1397.0	.5670-01	.7450-01	.8970-01	.9228	.4588-02	.2900-02	.4540	3.296	590.0
168	90.000	.88400	1398.0	.3640-01	.4700-01	.5580-01	.9228	.2851-02	.1863-02	.3100	2.259	580.3
168	90.000	.89400	1399.0	.5520-01	.7090-01	.8390-01	.9228	.4291-02	.2822-02	.4750	3.468	578.3
168	90.000	.90700	1400.0	.3580-01	.4630-01	.5520-01	.9228	.2821-02	.1828-02	.2990	2.181	582.8

IH72. RIGHT SRB CLEAN.

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
168	90.000	.91700	1401.0	.3640-01	.4720-01	.5620-01	.9228	.2876-02	.1862-02	.3040	2.216	583.2
168	90.000	.93200	1402.0	.4380-01	.5710-01	.6840-01	.9228	.3496-02	.2241-02	.3600	2.615	586.1
168	90.000	.93900	1403.0	.7010-01	.9290-01	.1129	.9228	.5774-02	.3582-02	.5440	3.935	594.8
169	95.000	.13560	1484.0	.5280-01	.6510-01	.7460-01	.9228	.3812-02	.2697-02	.5340	3.948	552.0
169	95.000	.13890	1486.0	.3950-01	.4860-01	.5560-01	.9228	.2841-02	.2020-02	.4040	2.994	549.7
169	95.000	.14730	1488.0	.3310-01	.4070-01	.4660-01	.9228	.2381-02	.1691-02	.3380	2.500	550.2
168	104.00	.10000+00	1330.0	.1740	.2336	.2552	.9376	.1305-01	.8895-02	1.301	9.396	600.3
168	104.00	.12000	1404.0	.7680-01	.9540-01	.1099	.9228	.5621-02	.3926-02	.7510	5.542	555.4
168	104.00	.12700	1405.0	.1097	.1399	.1646	.9228	.8414-02	.5608-02	.9690	7.091	573.8
168	104.00	.13400	1406.0	.4800-01	.5930-01	.6800-01	.9228	.3474-02	.2456-02	.4830	3.576	549.9
168	104.00	.14100	1407.0	.3800-01	.4690-01	.5360-01	.9228	.2741-02	.1945-02	.3860	2.863	548.0
168	104.00	.14800	1408.0	.3570-01	.4400-01	.5040-01	.9228	.2576-02	.1824-02	.3600	2.670	549.0
168	104.00	.15500	1409.0	.3600-01	.4450-01	.5100-01	.9228	.2605-02	.1842-02	.3630	2.686	549.7
168	104.00	.16200	1410.0	.4010-01	.4960-01	.5680-01	.9228	.2906-02	.2050-02	.4010	2.971	550.8
168	104.00	.17300	1411.0	.4900-01	.6090-01	.7030-01	.9228	.3594-02	.2503-02	.4760	3.509	556.7
168	104.00	.18000	1412.0	.5550-01	.6940-01	.8030-01	.9228	.4106-02	.2839-02	.5310	3.910	559.7
168	104.00	.18600	1413.0	.6290-01	.7860-01	.9110-01	.9228	.4658-02	.3214-02	.5980	4.405	560.5
168	104.00	.19300	1414.0	.6790-01	.8510-01	.9870-01	.9228	.5046-02	.3470-02	.6400	4.712	562.0
168	104.00	.20000	1415.0	.7220-01	.9060-01	.1052	.9228	.5378-02	.3689-02	.6780	4.984	563.0
168	104.00	.25000	1416.0	.7170-01	.8980-01	.1041	.9228	.5322-02	.3667-02	.6800	5.088	561.3
169	112.00	.13560	1489.0	.4840-01	.5940-01	.6790-01	.9227	.3471-02	.2473-02	.4980	3.693	548.4
169	112.00	.13730	1490.0	.3950-01	.4850-01	.5530-01	.9227	.2830-02	.2019-02	.4080	3.027	547.6
169	112.00	.13890	1491.0	.3460-01	.4250-01	.4850-01	.9227	.2477-02	.1769-02	.3580	2.657	547.3
169	112.00	.14560	1492.0	.8000-02	.9700-02	.1090-01	.9227	.5568-03	.4093-03	.9000-01	.6700	531.0
169	112.00	.14730	1493.0	.2690-01	.3290-01	.3750-01	.9227	.1917-02	.1376-02	.2830	2.100	544.4
168	112.50	.74000	1417.0	.6210-01	.7950-01	.9380-01	.9227	.4796-02	.3176-02	.5430	3.967	575.7
168	112.50	.75000	1418.0	.6260-01	.8040-01	.9500-01	.9227	.4859-02	.3202-02	.5420	3.956	577.4
169	112.50	.77100	1419.0	.5430-01	.6990-01	.8300-01	.9227	.4241-02	.2775-02	.4650	3.446	582.3
168	112.50	.92500	1420.0	.4590-01	.5970-01	.7140-01	.9227	.3650-02	.2349-02	.3800	2.767	584.7
168	112.50	.93200	1421.0	.5250-01	.6840-01	.8200-01	.9227	.4193-02	.2686-02	.4310	3.135	586.1
168	112.50	.93900	1422.0	.7560-01	.9980-01	.1208	.9227	.6178-02	.3866-02	.5960	4.321	592.4
168	112.50	.95300	1440.0	.3130-01	.4710-01	.5360-01	.9382	.2739-02	.1599-02	.1770	1.259	635.7
169	112.50	.96700	1441.0	.9900-01	.1683	.2016	.9382	.1031-01	.5064-02	.4620	3.240	658.8
169	112.50	.99400	1443.0	.6780-01	.1005	.1134	.9382	.5799-02	.3469-02	.4000	2.842	634.5
169	135.00	.80000-02	1331.0	.2486	.3344	.3703	.9359	.1893-01	.1271-01	1.858	14.10	603.7
168	135.00	.25000-01	1332.0	.2105	.2789	.3069	.9359	.1569-01	.1076-01	1.639	11.87	594.3
169	135.00	.50000-01	1333.0	.2165	.2877	.3170	.9359	.1621-01	.1107-01	1.677	12.12	598.4
168	135.00	.75000-01	1334.0	.1395	.1807	.1970	.9359	.1007-01	.7133-02	1.169	8.658	582.7
168	135.00	.10000+00	1335.0	.1766	.2325	.2553	.9359	.1305-01	.9028-02	1.400	10.15	591.5
168	135.00	.40000	1423.0	.6160-01	.7660-01	.8850-01	.9224	.4527-02	.3148-02	.5980	4.491	556.5
169	135.00	.92500	1424.0	.5400-01	.6920-01	.8180-01	.9224	.4184-02	.2762-02	.4730	3.452	578.7
169	140.00	.13560	1494.0	.4640-01	.5690-01	.6490-01	.9223	.3318-02	.2375-02	.4870	3.611	545.0
169	140.00	.13730	1495.0	.3910-01	.4780-01	.5460-01	.9223	.2789-02	.2001-02	.4120	3.060	544.0

IH72, RIGHT SRB CLEAN,

HU/HREF

(RVZR61)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
169	140.00	.13890	1496.0	.3680-01	.4510-01	.5140-01	.9223	.2628-02	.1883-02	.3870	2.873	544.4
169	140.00	.14560	1497.0	.4230-01	.5180-01	.5910-01	.9223	.3022-02	.2165-02	.4450	3.301	544.5
169	150.00	.14230	1499.0	.3550-01	.4340-01	.4940-01	.9222	.2527-02	.1815-02	.3760	2.793	542.8
169	180.00	.80000-02	1298.0	.2624	.3531	.4035	.9319	.2063-01	.1342-01	1.959	14.87	603.9
169	180.00	.15000-01	1299.0	.1828	.2319	.2569	.9319	.1313-01	.9345-02	1.654	11.90	572.9
168	180.00	.25000-01	1300.0	.2336	.2956	.3271	.9319	.1672-01	.1194-01	2.125	14.85	568.7
169	180.00	.50000-01	1301.0	.1809	.2303	.2555	.9319	.1306-01	.9248-02	1.617	11.26	575.1
168	180.00	.75000-01	1302.0	.1271	.1602	.1769	.9319	.9046-02	.6498-02	1.173	8.073	566.1
169	180.00	.10000+00	1303.0	.1604	.2058	.2294	.9319	.1173-01	.8200-02	1.392	10.15	580.1
168	225.00	.98000	1425.0	.6400-01	.8170-01	.9240-01	.9292	.4724-02	.3272-02	.5630	4.117	574.5
168	225.00	.99400	1426.0	.6930-01	.8910-01	.1012	.9292	.5173-02	.3541-02	.5940	4.332	578.9
168	263.00	.13600	1336.0	.2780-01	.3370-01	.3820-01	.9220	.1952-02	.1422-02	.3050	2.279	532.1
169	263.00	.20000	1472.0	.1220-01	.1470-01	.1660-01	.9220	.8486-03	.6259-03	.1390	1.045	527.1
169	263.00	.30000	1337.0	.3590-01	.4340-01	.4910-01	.9220	.2512-02	.1833-02	.3970	3.014	533.4
169	263.00	.40000	1473.0	.3840-01	.4670-01	.5320-01	.9220	.2720-02	.1962-02	.4120	3.068	539.8
169	263.00	.50000	1474.0	.3770-01	.4590-01	.5220-01	.9220	.2669-02	.1928-02	.4060	3.025	539.2
169	263.00	.60000	1475.0	.4540-01	.5530-01	.6300-01	.9220	.3223-02	.2322-02	.4860	3.614	540.7
169	263.00	.75000	1338.0	.4920-01	.5990-01	.6830-01	.9220	.3491-02	.2513-02	.5250	3.903	541.1
169	263.00	.81500	1339.0	.4470-01	.5450-01	.6210-01	.9220	.3177-02	.2284-02	.4750	3.533	541.8
169	263.00	.83700	1340.0	.4100-01	.5020-01	.5740-01	.9220	.2933-02	.2096-02	.4300	3.189	544.9
169	263.00	.88400	1341.0	.3510-01	.4320-01	.4950-01	.9220	.2531-02	.1796-02	.3620	2.681	548.5
169	263.00	.89400	1342.0	.3790-01	.4670-01	.5370-01	.9220	.2746-02	.1938-02	.3860	2.853	551.0
169	263.00	.90700	1343.0	.3910-01	.4830-01	.5570-01	.9220	.2849-02	.1997-02	.3910	2.886	554.3
169	263.00	.92800	1477.0	.4660-01	.5810-01	.6740-01	.9220	.3444-02	.2383-02	.4520	3.332	560.1
168	263.00	.93900	1344.0	.5640-01	.7140-01	.8380-01	.9220	.4286-02	.2883-02	.5130	3.763	568.7
169	270.00	.80000-02	1304.0	.2034	.2570	.2919	.9274	.1492-01	.1040-01	1.869	14.68	570.2
169	270.00	.50000-01	1306.0	.8570-01	.1061	.1189	.9274	.6080-02	.4384-02	.8560	6.021	554.7
168	270.00	.75000-01	1307.0	.8940-01	.1109	.1244	.9274	.6360-02	.4573-02	.8830	6.214	553.6
169	270.00	.10000+00	1308.0	.1111	.1393	.1574	.9274	.8048-02	.5682-02	1.052	7.734	564.7
168	270.00	.11500	1345.0	.9080-01	.1140	.1330	.9220	.6801-02	.4643-02	.8520	6.268	563.1
168	277.00	.13600	1346.0	.2890-01	.3500-01	.3970-01	.9220	.2032-02	.1477-02	.3150	2.350	533.5
168	277.00	.30000	1347.0	.3640-01	.4400-01	.5000-01	.9220	.2554-02	.1859-02	.3970	3.017	532.8
169	277.00	.40000	1464.0	.3340-01	.4070-01	.4630-01	.9220	.2368-02	.1708-02	.3580	2.665	540.2
169	277.00	.60000	1466.0	.4110-01	.5010-01	.5710-01	.9220	.2921-02	.2099-02	.4360	3.244	542.0
169	277.00	.70000	1467.0	.4500-01	.5510-01	.6310-01	.9220	.3226-02	.2299-02	.4680	3.472	546.3
168	277.00	.75000	1348.0	.4750-01	.5800-01	.6630-01	.9220	.3389-02	.2429-02	.4990	3.712	541.1
168	277.00	.81500	1349.0	.4450-01	.5440-01	.6220-01	.9220	.3183-02	.2274-02	.4640	3.447	542.6
168	277.00	.83700	1350.0	.4160-01	.5110-01	.5860-01	.9220	.2996-02	.2126-02	.4260	3.162	546.1
168	277.00	.88400	1351.0	.3680-01	.4530-01	.5200-01	.9220	.2661-02	.1883-02	.3750	2.781	547.4
168	277.00	.89400	1352.0	.3740-01	.4620-01	.5320-01	.9220	.2722-02	.1913-02	.3750	2.772	550.8
169	277.00	.90000	1468.0	.3630-01	.4490-01	.5170-01	.9220	.2645-02	.1854-02	.3630	2.681	554.2
169	277.00	.90700	1353.0	.3730-01	.4620-01	.5330-01	.9220	.2723-02	.1907-02	.3720	2.751	554.6
169	277.00	.92100	1469.0	.3950-01	.4910-01	.5690-01	.9220	.2910-02	.2020-02	.3860	2.848	558.6

IH72, RIGHT SRB CLEAN,

HU/HREF

(RVZR61)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
169	277.00	.92800	1470.0	.4320-01	.5400-01	.6270-01	.9220	.3205-02	.2210-02	.4160	3.063	561.6
169	277.00	.93700	1471.0	.4840-01	.6060-01	.7070-01	.9220	.3614-02	.2472-02	.4580	3.364	564.7
168	277.00	.93900	1354.0	.5640-01	.7170-01	.8460-01	.9220	.4326-02	.2882-02	.5030	3.682	572.1
169	335.00	.11000	1309.0	.1433	.1815	.2034	.9298	.1040-01	.7326-02	1.304	9.551	571.9
168	337.50	.74000	1355.0	.4230-01	.5150-01	.5860-01	.9220	.2997-02	.2164-02	.4530	3.376	537.2
168	337.50	.75000	1356.0	.4050-01	.4920-01	.5600-01	.9220	.2863-02	.2072-02	.4360	3.308	536.0
169	337.50	.76500	1357.0	.3700-01	.4500-01	.5110-01	.9220	.2613-02	.1893-02	.4020	3.048	537.4
169	337.50	.92500	1359.0	.3530-01	.4330-01	.4950-01	.9220	.2532-02	.1805-02	.3670	2.726	546.3
169	337.50	.93200	1360.0	.4140-01	.5090-01	.5840-01	.9220	.2987-02	.2115-02	.4240	3.141	549.4
169	337.50	.93900	1361.0	.5150-01	.6380-01	.7360-01	.9220	.3763-02	.2632-02	.5120	3.782	555.3

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR62)

RIGHT SRB

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
164	.1000-01	.0000	4.020	72.80	744.0	175.9	.4670	5.282	2612.	.2227-03	.1416-06	4.110
165	.0000	.0000	4.020	72.70	747.0	176.6	.4660	5.276	2618.	.2216-03	.1422-06	4.080

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
164	.5114-01	.1135-01
165	.5114-01	.1139-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
165	.00000	.80000-02	1310.0	.2644	.3255	.3550	.9320	.1815-01	.1352-01	2.696	20.88	548.0
164	.00000	.25000-01	1311.0	.1718	.2093	.2272	.9320	.1162-01	.8786-02	1.825	13.38	536.6
164	.00000	.83700	1364.0	.3340-01	.4040-01	.4580-01	.9220	.2344-02	.1708-02	.3650	2.731	530.4
164	.00000	.88400	1365.0	.4330-01	.5210-01	.5880-01	.9220	.3007-02	.2216-02	.4890	3.666	523.8
164	.00000	.90700	1366.0	.3640-01	.4410-01	.5000-01	.9220	.2558-02	.1860-02	.3960	2.961	531.3
164	5.0000	.75000-01	1313.0	.1414	.1716	.1860	.9320	.9510-02	.7230-02	1.527	11.03	533.1
164	5.0000	.11000	1314.0	.3610-01	.4290-01	.4610-01	.9320	.2358-02	.1844-02	.4280	3.234	511.9
164	15.600	.95300	1431.0	.6400-01	.8270-01	.9200-01	.9327	.4707-02	.3275-02	.5390	3.934	579.6
164	20.000	.75000-01	1316.0	.1492	.1819	.1975	.9320	.1010-01	.7628-02	1.578	11.38	537.4
164	20.000	.10000+00	1318.0	.1847	.2270	.2474	.9320	.1265-01	.9447-02	1.889	14.02	544.3
164	20.000	.11000	1319.0	.1863	.2291	.2497	.9320	.1277-01	.9525-02	1.897	14.08	545.1
164	20.000	.95300	1432.0	.7190-01	.9230-01	.1024	.9327	.5239-02	.3674-02	.6160	4.503	576.5
165	22.500	.72400	1367.0	.5090-01	.6180-01	.7030-01	.9220	.3595-02	.2601-02	.5490	4.159	536.4
164	22.500	.74000	1368.0	.6070-01	.7360-01	.8360-01	.9220	.4275-02	.3102-02	.6560	4.901	532.7
164	22.500	.75000	1369.0	.5250-01	.6360-01	.7220-01	.9220	.3693-02	.2683-02	.5690	4.253	532.1
165	22.500	.76500	1370.0	.4760-01	.5770-01	.6550-01	.9220	.3351-02	.2434-02	.5190	3.935	534.3
165	22.500	.77100	1371.0	.4810-01	.5840-01	.6620-01	.9220	.3388-02	.2461-02	.5240	3.913	534.3
164	22.500	.92500	1372.0	.4410-01	.5330-01	.6040-01	.9220	.3089-02	.2253-02	.4830	3.615	529.8
164	22.500	.93900	1374.0	.6110-01	.7450-01	.8490-01	.9220	.4343-02	.3123-02	.6450	4.807	537.6
164	24.400	.95300	1433.0	.8220-01	.1052	.1165	.9327	.5957-02	.4205-02	.7160	5.239	574.0

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR62)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
164	35.000	.75000-01	1321.0	.1538	.1875	.2036	.9320	.1041-01	.7867-02	1.631	11.76	537.0
164	35.000	.11000	1322.0	.1823	.2244	.2449	.9320	.1252-01	.9320-02	1.845	13.92	546.3
164	35.600	.95300	1434.0	.1082	.1368	.1505	.9327	.7697-02	.5535-02	.9870	7.252	565.9
164	40.000	.95300	1435.0	.1189	.1498	.1646	.9327	.8419-02	.6079-02	1.096	8.054	564.1
164	45.000	.74000	1375.0	.5040-01	.6100-01	.6920-01	.9220	.3541-02	.2577-02	.5500	4.179	531.0
164	45.000	.75000	1376.0	.5070-01	.6140-01	.6960-01	.9220	.3560-02	.2594-02	.5550	4.221	530.3
165	45.000	.76500	1377.0	.5030-01	.6090-01	.6910-01	.9220	.3532-02	.2573-02	.5530	4.129	532.6
165	45.000	.77100	1378.0	.4970-01	.6010-01	.6810-01	.9220	.3484-02	.2542-02	.5480	4.096	531.7
165	45.000	.88400	1381.0	.5170-01	.6190-01	.6950-01	.9220	.3555-02	.2646-02	.6030	4.538	519.3
165	45.000	.90700	1382.0	.4960-01	.5950-01	.6700-01	.9220	.3426-02	.2536-02	.5690	4.269	523.0
164	65.000	.11000	1323.0	.1821	.2248	.2455	.9320	.1255-01	.9313-02	1.826	13.31	548.2
164	67.500	.74000	1383.0	.5000-01	.6050-01	.6860-01	.9220	.3508-02	.2555-02	.5460	4.150	530.6
164	67.500	.75000	1384.0	.5040-01	.6100-01	.6920-01	.9220	.3540-02	.2576-02	.5490	4.175	531.1
165	67.500	.77100	1385.0	.4860-01	.5890-01	.6690-01	.9220	.3420-02	.2488-02	.5320	3.970	533.6
164	76.000	.10000+00	1324.0	.1853	.2288	.2499	.9320	.1278-01	.9477-02	1.857	13.76	548.3
164	76.000	.14100	1386.0	.3090-01	.3710-01	.4170-01	.9220	.2132-02	.1582-02	.3560	2.673	519.5
164	76.000	.14800	1387.0	.2720-01	.3260-01	.3660-01	.9220	.1873-02	.1392-02	.3140	2.365	518.4
164	76.000	.15500	1388.0	.2460-01	.2950-01	.3310-01	.9220	.1694-02	.1258-02	.2840	2.135	518.7
164	76.000	.16200	1389.0	.2370-01	.2840-01	.3190-01	.9220	.1633-02	.1213-02	.2730	2.055	519.0
164	76.000	.25000	1390.0	.4330-01	.5220-01	.5890-01	.9220	.3014-02	.2214-02	.4850	3.694	525.4
164	77.500	.95300	1436.0	.1135	.1419	.1554	.9327	.7946-02	.5802-02	1.077	7.940	558.6
164	77.500	.96700	1437.0	.1269	.1592	.1746	.9327	.8927-02	.6490-02	1.191	8.769	560.8
164	77.500	.99400	1439.0	.1418	.1796	.1978	.9327	.1012-01	.7253-02	1.283	9.419	567.3
165	90.000	.15000-01	1325.0	.1696	.2068	.2246	.9320	.1148-01	.8672-02	1.800	13.62	539.8
164	90.000	.25000-01	1326.0	.1433	.1765	.1926	.9320	.9850-02	.7330-02	1.450	10.58	546.4
165	90.000	.40000-01	1327.0	.1445	.1770	.1927	.9320	.9852-02	.7390-02	1.503	11.16	544.0
164	90.000	.60000-01	1328.0	.1790	.2205	.2405	.9320	.1230-01	.9154-02	1.812	12.60	546.4
164	90.000	.75000-01	1329.0	.1351	.1652	.1797	.9320	.9187-02	.6908-02	1.410	9.682	540.2
165	90.000	.13230	1479.0	.7190-01	.8710-01	.9880-01	.9220	.5054-02	.3676-02	.7860	5.865	533.6
165	90.000	.13390	1480.0	.5340-01	.6430-01	.7270-01	.9220	.3717-02	.2731-02	.6000	4.496	527.5
165	90.000	.13560	1481.0	.4030-01	.4840-01	.5450-01	.9220	.2788-02	.2060-02	.4600	3.452	524.0
165	90.000	.13730	1482.0	.3420-01	.4110-01	.4630-01	.9220	.2366-02	.1749-02	.3910	2.934	523.8
165	90.000	.13890	1483.0	.3100-01	.3720-01	.4190-01	.9220	.2142-02	.1587-02	.3570	2.678	522.5
165	90.000	.55000	1391.0	.6050-01	.7250-01	.8160-01	.9220	.4174-02	.3095-02	.6980	5.238	522.0
165	90.000	.65000	1392.0	.5640-01	.6800-01	.7680-01	.9220	.3927-02	.2882-02	.6320	4.728	528.2
164	90.000	.74000	1393.0	.9800-02	.1190-01	.1350-01	.9220	.6878-03	.5020-03	.1080	.8210	529.4
164	90.000	.76500	1394.0	.5440-01	.6590-01	.7460-01	.9220	.3817-02	.2783-02	.5970	4.462	529.9
164	90.000	.77100	1395.0	.5440-01	.6580-01	.7460-01	.9220	.3814-02	.2783-02	.5980	4.470	529.6
164	90.000	.81500	1396.0	.5280-01	.6380-01	.7220-01	.9220	.3691-02	.2700-02	.5840	4.447	528.0
164	90.000	.83700	1397.0	.5220-01	.6290-01	.7120-01	.9220	.3641-02	.2667-02	.5790	4.338	527.2
164	90.000	.88400	1398.0	.4310-01	.5180-01	.5830-01	.9220	.2982-02	.2204-02	.4900	3.681	521.9
164	90.000	.89400	1399.0	.4950-01	.5930-01	.6670-01	.9220	.3410-02	.2530-02	.5690	4.278	519.4
164	90.000	.90700	1400.0	.4310-01	.5190-01	.5860-01	.9220	.2997-02	.2206-02	.4850	3.639	524.4

IH72, RIGHT SRB CLEAN,

HU/HREF

(RVZR62)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
164	90.000	.91700	1401.0	.4280-01	.5160-01	.5830-01	.9220	.2982-02	.2191-02	.4790	3.594	525.4
164	90.000	.93200	1402.0	.4600-01	.5560-01	.6290-01	.9220	.3218-02	.2355-02	.5090	3.815	527.9
164	90.000	.93900	1403.0	.5210-01	.6330-01	.7190-01	.9220	.3679-02	.2666-02	.5620	4.194	533.5
165	95.000	.13560	1484.0	.4300-01	.5180-01	.5850-01	.9220	.2989-02	.2200-02	.4860	3.641	526.5
165	95.000	.13890	1486.0	.3180-01	.3820-01	.4300-01	.9220	.2200-02	.1626-02	.3630	2.724	524.0
165	95.000	.14560	1487.0	.2480-01	.2990-01	.3370-01	.9220	.1723-02	.1270-02	.2820	2.112	525.5
165	95.000	.14730	1488.0	.2430-01	.2920-01	.3290-01	.9220	.1681-02	.1240-02	.2760	2.068	525.1
164	104.00	.10000+00	1330.0	.1743	.2165	.2372	.9320	.1213-01	.8913-02	1.701	12.57	553.5
164	104.00	.12000	1404.0	.5940-01	.7170-01	.8100-01	.9220	.4145-02	.3036-02	.6590	4.936	527.2
164	104.00	.12700	1405.0	.9570-01	.1172	.1340	.9220	.6853-02	.4895-02	.9940	7.394	541.2
164	104.00	.13400	1406.0	.3920-01	.4720-01	.5320-01	.9220	.2718-02	.2006-02	.4450	3.338	522.6
164	104.00	.14100	1407.0	.3210-01	.3850-01	.4330-01	.9220	.2216-02	.1640-02	.3660	2.748	521.2
164	104.00	.14800	1408.0	.2590-01	.3100-01	.3500-01	.9220	.1788-02	.1323-02	.2950	2.215	521.3
164	104.00	.15500	1409.0	.2410-01	.2890-01	.3260-01	.9220	.1666-02	.1231-02	.2740	2.060	521.6
164	104.00	.16200	1410.0	.2510-01	.3020-01	.3400-01	.9220	.1738-02	.1285-02	.2860	2.150	521.5
164	104.00	.17300	1411.0	.2540-01	.3050-01	.3440-01	.9220	.1759-02	.1298-02	.2870	2.154	523.1
164	104.00	.18000	1412.0	.2660-01	.3200-01	.3610-01	.9220	.1844-02	.1358-02	.2990	2.247	523.8
164	104.00	.18600	1413.0	.2820-01	.3390-01	.3830-01	.9220	.1957-02	.1441-02	.3180	2.383	523.9
164	104.00	.19300	1414.0	.3110-01	.3740-01	.4220-01	.9220	.2159-02	.1590-02	.3500	2.629	524.0
164	104.00	.20000	1415.0	.3520-01	.4240-01	.4790-01	.9220	.2451-02	.1802-02	.3950	2.960	525.2
164	104.00	.25000	1416.0	.5500-01	.6650-01	.7530-01	.9220	.3850-02	.2811-02	.6050	4.601	529.1
165	112.00	.13560	1489.0	.3910-01	.4720-01	.5350-01	.9220	.2734-02	.1998-02	.4330	3.236	530.8
165	112.00	.13730	1490.0	.3440-01	.4150-01	.4700-01	.9220	.2404-02	.1758-02	.3820	2.853	530.4
165	112.00	.13890	1491.0	.3060-01	.3700-01	.4190-01	.9220	.2142-02	.1566-02	.3400	2.540	530.5
165	112.00	.14560	1492.0	.6400-02	.7700-02	.8700-02	.9220	.4431-03	.3261-03	.7200-01	.5390	526.6
165	112.00	.14730	1493.0	.1850-01	.2230-01	.2530-01	.9220	.1292-02	.9438-03	.2040	1.527	531.0
164	112.50	.74000	1417.0	.4910-01	.6020-01	.6880-01	.9220	.3518-02	.2513-02	.5110	3.798	541.0
164	112.50	.75000	1418.0	.5040-01	.6170-01	.7040-01	.9220	.3602-02	.2579-02	.5270	3.923	539.9
165	112.50	.77100	1419.0	.5180-01	.6300-01	.7170-01	.9220	.3666-02	.2649-02	.5570	4.218	537.3
164	112.50	.92500	1420.0	.4370-01	.5280-01	.5980-01	.9220	.3059-02	.2234-02	.4810	3.597	529.1
164	112.50	.93200	1421.0	.4610-01	.5590-01	.6340-01	.9220	.3241-02	.2360-02	.5040	3.764	530.9
164	112.50	.93900	1422.0	.6050-01	.7360-01	.8360-01	.9220	.4277-02	.3096-02	.6510	4.859	534.0
164	112.50	.95300	1440.0	.8100-01	.1028	.1133	.9327	.5794-02	.4141-02	.7270	5.331	568.7
165	112.50	.96700	1441.0	.1399	.1773	.1954	.9327	.9991-02	.7152-02	1.266	9.278	570.4
165	112.50	.99400	1443.0	.1214	.1566	.1741	.9327	.8903-02	.6211-02	1.033	7.530	581.0
165	135.00	.80000-02	1331.0	.2483	.3112	.3425	.9320	.1751-01	.1270-01	2.347	18.18	562.5
164	135.00	.25000-01	1332.0	.1470	.1836	.2017	.9320	.1032-01	.7517-02	1.402	10.34	557.8
165	135.00	.50000-01	1333.0	.1963	.2455	.2699	.9320	.1380-01	.1004-01	1.870	13.77	561.0
164	135.00	.75000-01	1334.0	.1213	.1498	.1637	.9320	.8371-02	.6200-02	1.210	9.116	549.1
164	135.00	.10000+00	1335.0	.1655	.2069	.2273	.9320	.1162-01	.8465-02	1.576	11.62	558.1
164	135.00	.40000	1423.0	.4740-01	.5870-01	.6780-01	.9220	.3467-02	.2422-02	.4670	3.511	551.6
165	135.00	.92500	1424.0	.5060-01	.6220-01	.7130-01	.9220	.3648-02	.2586-02	.5180	3.839	547.1
165	140.00	.13560	1494.0	.3820-01	.4640-01	.5280-01	.9220	.2701-02	.1953-02	.4110	3.065	536.8

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, RIGHT SRB CLEAN,

(RVZR62)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
165	140.00	.13730	1495.0	.3330-01	.4050-01	.4610-01	.9220	.2359-02	.1705-02	.3590	2.674	537.0
165	140.00	.13890	1496.0	.2700-01	.3290-01	.3740-01	.9220	.1914-02	.1382-02	.2900	2.160	537.6
165	140.00	.14560	1497.0	.2720-01	.3300-01	.3750-01	.9220	.1920-02	.1389-02	.2930	2.184	536.5
165	150.00	.14230	1499.0	.2470-01	.3000-01	.3420-01	.9220	.1748-02	.1262-02	.2650	1.971	537.8
165	180.00	.80000-02	1298.0	.2721	.3460	.3835	.9320	.1961-01	.1392-01	2.435	18.76	572.4
164	180.00	.15000-01	1299.0	.1491	.1839	.2007	.9320	.1026-01	.7626-02	1.508	10.99	549.6
165	180.00	.25000-01	1300.0	.1792	.2199	.2395	.9320	.1225-01	.9166-02	1.843	13.04	543.2
164	180.00	.50000-01	1301.0	.1885	.2361	.2597	.9320	.1328-01	.9639-02	1.786	12.52	562.1
165	180.00	.75000-01	1302.0	.1155	.1428	.1562	.9320	.7987-02	.5904-02	1.146	7.954	550.2
164	180.00	.10000+00	1303.0	.1494	.1932	.2161	.9320	.1105-01	.7638-02	1.258	9.160	582.7
164	225.00	.98000	1425.0	.1022	.1362	.1538	.9327	.7867-02	.5228-02	.7810	5.651	595.0
164	225.00	.99400	1426.0	.8700-01	.1149	.1292	.9327	.6607-02	.4451-02	.6830	4.954	590.8
164	263.00	.13600	1336.0	.3820-01	.4590-01	.5180-01	.9220	.2648-02	.1956-02	.4350	3.264	522.1
165	263.00	.20000	1472.0	.3720-01	.4450-01	.5000-01	.9220	.2557-02	.1904-02	.4350	3.268	519.1
165	263.00	.30000	1337.0	.6160-01	.7400-01	.8330-01	.9220	.4260-02	.3153-02	.7070	5.396	523.1
165	263.00	.40000	1473.0	.5740-01	.6940-01	.7850-01	.9220	.4017-02	.2934-02	.6340	4.741	531.2
165	263.00	.50000	1474.0	.5630-01	.6790-01	.7680-01	.9220	.3929-02	.2880-02	.6280	4.702	529.1
165	263.00	.60000	1475.0	.6320-01	.7610-01	.8590-01	.9220	.4391-02	.3233-02	.7140	5.352	526.4
165	263.00	.75000	1338.0	.5510-01	.6590-01	.7410-01	.9220	.3789-02	.2818-02	.6410	4.819	519.9
165	263.00	.81500	1339.0	.5640-01	.6690-01	.7470-01	.9220	.3822-02	.2884-02	.6850	5.176	509.9
165	263.00	.83700	1340.0	.4950-01	.5890-01	.6600-01	.9220	.3375-02	.2529-02	.5890	4.438	514.6
165	263.00	.88400	1341.0	.4980-01	.5940-01	.6650-01	.9220	.3401-02	.2548-02	.5920	4.460	515.1
165	263.00	.89400	1342.0	.4850-01	.5780-01	.6480-01	.9220	.3315-02	.2481-02	.5750	4.329	515.7
165	263.00	.90700	1343.0	.4770-01	.5710-01	.6420-01	.9220	.3283-02	.2441-02	.5550	4.174	519.9
165	263.00	.92800	1477.0	.5220-01	.6270-01	.7060-01	.9220	.3609-02	.2671-02	.5990	4.499	523.0
164	263.00	.93900	1344.0	.6860-01	.8300-01	.9410-01	.9220	.4812-02	.3508-02	.7510	5.620	530.1
165	270.00	.80000-02	1304.0	.2309	.2847	.3107	.9320	.1589-01	.1181-01	2.339	18.56	549.3
165	270.00	.50000-01	1306.0	.2052	.2536	.2772	.9320	.1417-01	.1050-01	2.055	14.48	551.5
164	270.00	.75000-01	1307.0	.1499	.1836	.1999	.9320	.1022-01	.7664-02	1.551	10.98	541.9
165	270.00	.10000+00	1308.0	.1845	.2309	.2539	.9320	.1238-01	.9434-02	1.754	12.91	561.5
164	270.00	.11500	1345.0	.1292	.1618	.1883	.9320	.9628-02	.6609-02	1.224	9.019	559.1
164	277.00	.13600	1346.0	.3550-01	.4260-01	.4800-01	.9220	.2454-02	.1816-02	.4060	3.047	521.0
164	277.00	.30000	1347.0	.5980-01	.7160-01	.8050-01	.9220	.4117-02	.3058-02	.6900	5.276	518.7
165	277.00	.40000	1464.0	.5830-01	.7010-01	.7910-01	.9220	.4046-02	.2982-02	.6610	4.958	525.6
165	277.00	.60000	1466.0	.6130-01	.7350-01	.8270-01	.9220	.4227-02	.3134-02	.7070	5.306	521.9
165	277.00	.70000	1467.0	.5640-01	.6780-01	.7640-01	.9220	.3906-02	.2885-02	.6430	4.826	524.3
164	277.00	.75000	1348.0	.5880-01	.7020-01	.7880-01	.9220	.4032-02	.3007-02	.6860	5.169	516.0
164	277.00	.81500	1349.0	.5920-01	.7030-01	.7850-01	.9220	.4015-02	.3026-02	.7130	5.391	508.6
164	277.00	.83700	1350.0	.5520-01	.6580-01	.7370-01	.9220	.3767-02	.2825-02	.6560	4.948	512.2
164	277.00	.88400	1351.0	.4970-01	.5900-01	.6590-01	.9220	.3370-02	.2539-02	.5980	4.521	508.8
164	277.00	.89400	1352.0	.4960-01	.5900-01	.6610-01	.9220	.3378-02	.2538-02	.5920	4.473	510.9
165	277.00	.90000	1468.0	.5170-01	.6150-01	.6880-01	.9220	.3521-02	.2645-02	.6200	4.675	513.1
165	277.00	.90700	1353.0	.5070-01	.6030-01	.6750-01	.9220	.3454-02	.2592-02	.6060	4.567	513.7

IH72, RIGHT SRB CLEAN,

HU/HREF

(RVZR62)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
165	277.00	.92100	1469.0	.5220-01	.6230-01	.6980-01	.9220	.3570-02	.2669-02	.6160	4.642	516.4
165	277.00	.92800	1470.0	.5320-01	.6360-01	.7140-01	.9220	.3651-02	.2721-02	.6230	4.687	518.4
165	277.00	.93700	1471.0	.5800-01	.6950-01	.7810-01	.9220	.3997-02	.2966-02	.6710	5.040	521.2
164	277.00	.93900	1354.0	.6340-01	.7650-01	.8660-01	.9220	.4429-02	.3241-02	.7020	5.255	527.8
165	335.00	.11000	1309.0	.1913	.2366	.2587	.9320	.1323-01	.9785-02	1.911	14.13	552.1
164	337.50	.74000	1355.0	.5530-01	.6690-01	.7570-01	.9220	.3871-02	.2829-02	.6100	4.569	528.5
164	337.50	.75000	1356.0	.5380-01	.6490-01	.7340-01	.9220	.3752-02	.2750-02	.5980	4.555	526.9
165	337.50	.76500	1357.0	.5140-01	.6190-01	.6990-01	.9220	.3574-02	.2627-02	.5780	4.403	527.3
165	337.50	.92500	1359.0	.5430-01	.6530-01	.7350-01	.9220	.3760-02	.2779-02	.6210	4.659	523.9
165	337.50	.93200	1360.0	.5720-01	.6890-01	.7780-01	.9220	.3977-02	.2926-02	.6460	4.838	526.7
165	337.50	.93900	1361.0	.7090-01	.8590-01	.9750-01	.9220	.4985-02	.3627-02	.7760	5.791	533.5

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR63)

RIGHT SRB

PARAMETRIC DATA

ALPHA = .0000 BETA = 5.000 IH NO = 72.00 MACH = 4.020

•••TEST CONDITIONS•••

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
166	.0000	5.000	4.020	72.80	742.0	175.3	.4670	5.279	2608.	.2233-03	.1411-06	4.127
167	.0000	5.000	4.020	72.70	740.0	174.8	.4660	5.275	2605.	.2238-03	.1408-06	4.141

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
166	.5110-01	.1133-01
167	.5106-01	.1132-01

•••TEST DATA•••

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
167	.00000	.80000-02	1310.0	.2467	.3141	.3486	.9319	.1780-01	.1260-01	2.171	16.65	567.6
166	.00000	.25000-01	1311.0	.1658	.2078	.2288	.9319	.1169-01	.8470-02	1.552	11.26	558.6
166	.00000	.83700	1364.0	.4250-01	.5110-01	.5770-01	.9220	.2947-02	.2170-02	.4770	3.579	522.3
166	.00000	.88400	1365.0	.4920-01	.5890-01	.6630-01	.9220	.3389-02	.2512-02	.5620	4.230	518.1
166	.00000	.90700	1366.0	.4690-01	.5660-01	.6390-01	.9220	.3264-02	.2399-02	.5240	3.931	523.5
166	5.0000	.75000-01	1313.0	.1216	.1500	.1643	.9315	.8394-02	.6212-02	1.215	8.723	546.2
166	5.0000	.11000	1314 0	.7170-01	.8700-01	.9450-01	.9315	.4827-02	.3664-02	.7730	5.781	530.8
166	15.600	.95300	1431.0	.1047	.1294	.1420	.9312	.7256-02	.5348-02	1.038	7.692	547.8
166	20.000	.75000-01	1316.0	.1347	.1664	.1836	.9302	.9380-02	.6882-02	1.338	9.602	547.4
166	20.000	.10000+00	1318.0	.1610	.2009	.2227	.9302	.1138-01	.8229-02	1.539	11.37	554.8
166	20.000	.11000	1319.0	.1654	.2060	.2281	.9302	.1165-01	.8453-02	1.593	11.77	553.4
166	20.000	.95300	1432.0	.8480-01	.1046	.1148	.9309	.5867-02	.4334-02	.8510	6.314	545.5
167	22.500	.72400	1367.0	.4290-01	.5220-01	.5940-01	.9220	.3034-02	.2192-02	.4560	3.461	532.1
166	22.500	.74000	1368.0	.4040-01	.4890-01	.5530-01	.9220	.2826-02	.2066-02	.4450	3.333	526.6
166	22.500	.75000	1369.0	.4290-01	.5180-01	.5850-01	.9220	.2991-02	.2192-02	.4750	3.560	525.2
167	22.500	.76500	1370.0	.4070-01	.4940-01	.5610-01	.9220	.2863-02	.2080-02	.4390	3.343	528.8
167	22.500	.77100	1371.0	.4140-01	.5020-01	.5700-01	.9220	.2909-02	.2114-02	.4470	3.342	528.7
166	22.500	.92500	1372.0	.3460-01	.4160-01	.4690-01	.9220	.2395-02	.1768-02	.3910	2.938	520.7
166	22.500	.93900	1374.0	.4910-01	.5940-01	.6730-01	.9220	.3441-02	.2510-02	.5370	4.017	528.0
166	24.400	.95300	1433.0	.8040-01	.9910-01	.1090	.9305	.5568-02	.4108-02	.8070	5.989	545.4

IH72, RIGHT SRB CLEAN,

HU/HREF

(RVZR63)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
166	35.000	.75000-01	1321.0	.1318	.1622	.1795	.9291	.9171-02	.6734-02	1.332	9.575	544.0
166	35.000	.11000	1322.0	.1487	.1840	.2042	.9291	.1043-01	.7600-02	1.471	11.08	548.3
166	35.600	.95300	1434.0	.6120-01	.7530-01	.8310-01	.9297	.4247-02	.3129-02	.6200	4.602	543.8
166	40.000	.95300	1435.0	.5770-01	.7100-01	.7850-01	.9294	.4013-02	.2947-02	.5810	4.313	544.7
166	45.000	.74000	1375.0	.3230-01	.3890-01	.4410-01	.9220	.2251-02	.1648-02	.3560	2.714	525.8
166	45.000	.75000	1376.0	.2910-01	.3520-01	.3970-01	.9220	.2031-02	.1489-02	.3230	2.463	524.9
167	45.000	.76500	1377.0	.2900-01	.3520-01	.4000-01	.9220	.2044-02	.1483-02	.3120	2.332	529.7
167	45.000	.77100	1378.0	.2870-01	.3480-01	.3950-01	.9220	.2015-02	.1464-02	.3090	2.312	528.9
167	45.000	.88400	1381.0	.3040-01	.3670-01	.4150-01	.9220	.2119-02	.1554-02	.3370	2.528	523.2
167	45.000	.90700	1382.0	.2620-01	.3160-01	.3580-01	.9220	.1827-02	.1336-02	.2870	2.151	525.2
166	65.000	.11000	1323.0	.1329	.1638	.1828	.9277	.9340-02	.6792-02	1.335	9.742	545.3
166	67.500	.74000	1383.0	.3930-01	.4760-01	.5410-01	.9220	.2763-02	.2007-02	.4240	3.227	530.4
166	67.500	.75000	1384.0	.3920-01	.4760-01	.5410-01	.9220	.2764-02	.2003-02	.4210	3.201	531.6
167	67.500	.77100	1385.0	.4220-01	.5150-01	.5870-01	.9220	.2999-02	.2152-02	.4400	3.283	535.5
166	76.000	.10000+00	1324.0	.1349	.1663	.1858	.9275	.9494-02	.6895-02	1.355	10.05	545.4
166	76.000	.14100	1386.0	.2510-01	.3020-01	.3410-01	.9220	.1740-02	.1282-02	.2820	2.118	521.9
166	76.000	.14800	1387.0	.1980-01	.2380-01	.2690-01	.9220	.1372-02	.1014-02	.2250	1.688	520.3
166	76.000	.15500	1388.0	.1770-01	.2120-01	.2390-01	.9220	.1221-02	.9030-03	.2000	1.507	519.9
166	76.000	.16200	1389.0	.1670-01	.2000-01	.2250-01	.9220	.1152-02	.8526-03	.1900	1.427	519.3
166	76.000	.25000	1390.0	.1460-01	.1760-01	.1980-01	.9220	.1013-02	.7472-03	.1650	1.261	521.0
166	77.500	.95300	1436.0	.1517	.1922	.2177	.9280	.1113-01	.7749-02	1.363	10.01	565.9
166	77.500	.96700	1437.0	.1433	.1814	.2055	.9280	.1050-01	.7324-02	1.293	9.500	565.3
166	77.500	.99400	1439.0	.1348	.1713	.1944	.9280	.9934-02	.6888-02	1.200	8.805	567.7
167	90.000	.15000-01	1325.0	.1357	.1664	.1854	.9274	.9467-02	.6930-02	1.390	10.52	539.3
166	90.000	.25000-01	1326.0	.1014	.1237	.1374	.9274	.7023-02	.5179-02	1.063	7.792	536.6
167	90.000	.40000-01	1327.0	.6750-01	.8310-01	.9270-01	.9274	.4736-02	.3446-02	.6800	5.055	542.6
166	90.000	.60000-01	1328.0	.7880-01	.9650-01	.1074	.9274	.5489-02	.4029-02	.8160	5.695	539.3
166	90.000	.75000-01	1329.0	.8080-01	.9870-01	.1097	.9274	.5604-02	.4127-02	.8440	5.803	537.4
167	90.000	.13230	1479.0	.5400-01	.6600-01	.7540-01	.9220	.3850-02	.2760-02	.5630	4.194	536.1
167	90.000	.13390	1480.0	.3830-01	.4660-01	.5300-01	.9220	.2708-02	.1955-02	.4050	3.029	532.5
167	90.000	.13560	1481.0	.2900-01	.3520-01	.3990-01	.9220	.2039-02	.1480-02	.3120	2.333	529.3
167	90.000	.13730	1482.0	.2800-01	.3400-01	.3860-01	.9220	.1972-02	.1432-02	.3020	2.260	529.0
167	90.000	.13890	1483.0	.2110-01	.2560-01	.2900-01	.9220	.1482-02	.1080-02	.2290	1.718	527.5
167	90.000	.55000	1391.0	.4220-01	.5150-01	.5870-01	.9220	.2998-02	.2157-02	.4440	3.313	534.2
167	90.000	.65000	1392.0	.4450-01	.5450-01	.6240-01	.9220	.3189-02	.2270-02	.4550	3.387	539.5
166	90.000	.74000	1393.0	.1260-01	.1540-01	.1750-01	.9220	.8924-03	.6453-03	.1350	1.024	532.9
166	90.000	.76500	1394.0	.4850-01	.5920-01	.6760-01	.9220	.3454-02	.2476-02	.5060	3.770	537.5
166	90.000	.77100	1395.0	.4930-01	.6010-01	.6870-01	.9220	.3508-02	.2517-02	.5160	3.842	537.0
166	90.000	.81500	1396.0	.4820-01	.5880-01	.6710-01	.9220	.3428-02	.2464-02	.5070	3.846	536.0
166	90.000	.83700	1397.0	.4940-01	.6020-01	.6870-01	.9220	.3509-02	.2526-02	.5220	3.892	535.3
166	90.000	.88400	1398.0	.4050-01	.4910-01	.5580-01	.9220	.2850-02	.2071-02	.4390	3.281	530.1
166	90.000	.89400	1399.0	.4430-01	.5360-01	.6080-01	.9220	.3106-02	.2263-02	.4830	3.611	528.6
166	90.000	.90700	1400.0	.4420-01	.5370-01	.6110-01	.9220	.3121-02	.2257-02	.4720	3.524	532.8

IH72, RIGHT SRB CLEAN,

HU/HREF

(RVZR63)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
166	90.000	.91700	1401.0	.4340-01	.5280-01	.6010-01	.9220	.3072-02	.2218-02	.4610	3.444	533.8
166	90.000	.93200	1402.0	.4770-01	.5820-01	.6640-01	.9220	.3394-02	.2439-02	.5010	3.737	536.3
166	90.000	.93900	1403.0	.5690-01	.6980-01	.7990-01	.9220	.4082-02	.2907-02	.5840	4.344	540.9
167	95.000	.13560	1484.0	.3110-01	.3770-01	.4290-01	.9220	.2190-02	.1586-02	.3320	2.479	530.8
167	95.000	.13890	1486.0	.2740-01	.3320-01	.3760-01	.9220	.1921-02	.1397-02	.2960	2.214	528.3
167	95.000	.14560	1487.0	.2030-01	.2450-01	.2780-01	.9220	.1420-02	.1036-02	.2210	1.657	526.5
167	95.000	.14730	1488.0	.1790-01	.2160-01	.2450-01	.9220	.1252-02	.9145-03	.1960	1.468	525.8
166	104.00	.10000+00	1330.0	.1260	.1554	.1736	.9275	.8871-02	.6441-02	1.265	9.385	545.5
166	104.00	.12000	1404.0	.4330-01	.5250-01	.5950-01	.9220	.3042-02	.2215-02	.4710	3.524	529.1
166	104.00	.12700	1405.0	.6950-01	.8500-01	.9720-01	.9220	.4964-02	.3551-02	.7220	5.376	538.5
166	104.00	.13400	1406.0	.2800-01	.3370-01	.3810-01	.9220	.1949-02	.1430-02	.3100	2.329	524.7
166	104.00	.14100	1407.0	.2430-01	.2930-01	.3310-01	.9220	.1689-02	.1244-02	.2730	2.052	522.2
166	104.00	.14800	1408.0	.2010-01	.2410-01	.2720-01	.9220	.1390-02	.1025-02	.2260	1.699	521.3
166	104.00	.15500	1409.0	.1710-01	.2060-01	.2320-01	.9220	.1187-02	.8763-03	.1940	1.457	520.5
166	104.00	.16200	1410.0	.1720-01	.2070-01	.2330-01	.9220	.1191-02	.8804-03	.1950	1.469	519.9
166	104.00	.17300	1411.0	.1500-01	.1810-01	.2040-01	.9220	.1042-02	.7681-03	.1690	1.272	521.4
166	104.00	.18000	1412.0	.1490-01	.1790-01	.2020-01	.9220	.1030-02	.7595-03	.1670	1.258	521.4
166	104.00	.18600	1413.0	.1420-01	.1710-01	.1930-01	.9220	.9864-03	.7277-03	.1610	1.206	521.2
166	104.00	.19300	1414.0	.1380-01	.1660-01	.1870-01	.9220	.9536-03	.7036-03	.1550	1.167	521.1
166	104.00	.20000	1415.0	.1320-01	.1590-01	.1790-01	.9220	.9158-03	.6754-03	.1490	1.118	521.4
166	104.00	.25000	1416.0	.2140-01	.2580-01	.2910-01	.9220	.1488-02	.1093-02	.2380	1.819	523.7
167	112.00	.13560	1489.0	.3050-01	.3700-01	.4200-01	.9220	.2144-02	.1557-02	.3280	2.453	529.3
167	112.00	.13730	1490.0	.2690-01	.3250-01	.3690-01	.9220	.1885-02	.1372-02	.2910	2.179	527.8
167	112.00	.13890	1491.0	.2320-01	.2810-01	.3180-01	.9220	.1625-02	.1186-02	.2530	1.894	526.7
167	112.00	.14560	1492.0	.5300-02	.6400-02	.7200-02	.9220	.3677-03	.2685-03	.5700-01	.4310	525.9
167	112.00	.14730	1493.0	.1540-01	.1860-01	.2110-01	.9220	.1077-02	.7870-03	.1690	1.265	525.5
166	112.50	.74000	1417.0	.4330-01	.5260-01	.5990-01	.9220	.3062-02	.2210-02	.4600	3.431	533.9
166	112.50	.75000	1418.0	.4290-01	.5210-01	.5930-01	.9220	.3032-02	.2190-02	.4560	3.405	533.6
167	112.50	.77100	1419.0	.4340-01	.5310-01	.6060-01	.9220	.3095-02	.2215-02	.4500	3.408	537.0
166	112.50	.92500	1420.0	.4610-01	.5610-01	.6390-01	.9220	.3264-02	.2356-02	.4900	3.655	534.0
166	112.50	.93200	1421.0	.4910-01	.5990-01	.6830-01	.9220	.3490-02	.2510-02	.5170	3.858	535.7
166	112.50	.93900	1422.0	.5670-01	.6940-01	.7940-01	.9220	.4055-02	.2897-02	.5870	4.371	539.2
166	112.50	.95300	1440.0	.1679	.2144	.2438	.9282	.1246-01	.8580-02	1.468	10.76	570.7
167	112.50	.96700	1441.0	.2048	.2621	.2986	.9282	.1525-01	.1046-01	1.768	12.96	570.8
167	112.50	.99400	1443.0	.1593	.2057	.2355	.9282	.1203-01	.8136-02	1.336	9.762	575.8
167	135.00	.80000-02	1331.0	.2449	.3085	.3472	.9285	.1773-01	.1251-01	2.245	17.40	560.5
166	135.00	.25000-01	1332.0	.1203	.1488	.1655	.9286	.8457-02	.6149-02	1.194	8.851	547.7
167	135.00	.50000-01	1333.0	.1209	.1497	.1667	.9285	.8512-02	.6176-02	1.189	8.818	547.3
166	135.00	.75000-01	1334.0	.9840-01	.1209	.1340	.9286	.6845-02	.5029-02	1.004	7.590	542.2
166	135.00	.10000+00	1335.0	.1517	.1873	.2083	.9286	.1064-01	.7752-02	1.511	11.21	546.9
166	135.00	.40000	1423.0	.4190-01	.5080-01	.5770-01	.9220	.2946-02	.2140-02	.4520	3.439	530.5
167	135.00	.92500	1424.0	.3590-01	.4390-01	.5010-01	.9220	.2560-02	.1834-02	.3730	2.782	536.4
167	140.00	.13560	1494.0	.3100-01	.3760-01	.4270-01	.9220	.2182-02	.1581-02	.3310	2.479	530.3

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, RIGHT SRB CLEAN,

(RVZR63)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
167	140.00	.13730	1495.0	.2780-01	.3380-01	.3830-01	.9220	.1957-02	.1422-02	.3000	2.245	529.0
167	140.00	.13890	1496.0	.2480-01	.3000-01	.3410-01	.9220	.1741-02	.1267-02	.2680	2.010	528.0
167	150.00	.14560	1497.0	.2330-01	.2820-01	.3190-01	.9220	.1629-02	.1190-02	.2550	1.909	525.9
167	180.00	.14230	1499.0	.2330-01	.2820-01	.3200-01	.9220	.1635-02	.1191-02	.2530	1.898	527.2
167	180.00	.80000-02	1298.0	.2844	.3672	.4105	.9319	.2096-01	.1452-01	2.382	18.32	575.9
166	180.00	.15000-01	1299.0	.1704	.2121	.2327	.9319	.1188-01	.8701-02	1.638	11.92	551.7
167	180.00	.25000-01	1300.0	.2001	.2452	.2670	.9319	.1364-01	.1023-01	2.062	14.61	540.2
166	180.00	.50000-01	1301.0	.1900	.2391	.2638	.9319	.1347-01	.9701-02	1.746	12.25	559.9
167	180.00	.75000-01	1302.0	.1282	.1588	.1738	.9319	.8879-02	.6553-02	1.264	8.776	549.0
166	180.00	.10000+00	1303.0	.1759	.2237	.2481	.9319	.1267-01	.8984-02	1.556	11.42	566.8
166	225.00	.98000	1425.0	.1515	.2036	.2240	.9368	.1144-01	.7741-02	1.122	8.117	596.9
166	225.00	.99400	1426.0	.1337	.1780	.1951	.9368	.9971-02	.6831-02	1.018	7.375	592.9
166	263.00	.13600	1336.0	.4540-01	.5550-01	.6310-01	.9228	.3227-02	.2317-02	.4710	3.507	538.6
167	263.00	.20000	1472.0	.6830-01	.8480-01	.9760-01	.9228	.4984-02	.3486-02	.6630	4.907	549.9
167	263.00	.30000	1337.0	.7220-01	.8960-01	.1030	.9228	.5260-02	.3688-02	.7050	5.309	548.9
167	263.00	.40000	1473.0	.6750-01	.8410-01	.9700-01	.9228	.4953-02	.3447-02	.6470	4.789	552.1
167	263.00	.50000	1474.0	.6530-01	.8110-01	.9340-01	.9228	.4767-02	.3333-02	.6330	4.684	550.1
167	263.00	.60000	1475.0	.6180-01	.7750-01	.8990-01	.9228	.4589-02	.3154-02	.5760	4.252	557.2
167	263.00	.75000	1338.0	.6420-01	.8010-01	.9250-01	.9228	.4722-02	.3279-02	.6120	4.527	553.1
167	263.00	.81500	1339.0	.6220-01	.7730-01	.8900-01	.9228	.4547-02	.3175-02	.6010	4.448	550.7
167	263.00	.83700	1340.0	.5550-01	.6900-01	.7960-01	.9228	.4063-02	.2832-02	.5340	3.950	551.5
167	263.00	.88400	1341.0	.5110-01	.6370-01	.7360-01	.9228	.3760-02	.2609-02	.4870	3.599	553.3
167	263.00	.89400	1342.0	.4900-01	.6110-01	.7050-01	.9228	.3602-02	.2500-02	.4660	3.448	553.3
167	263.00	.90700	1343.0	.5170-01	.6470-01	.7500-01	.9228	.3829-02	.2639-02	.4850	3.580	556.2
166	263.00	.92800	1477.0	.6440-01	.8090-01	.9400-01	.9228	.4802-02	.3289-02	.5960	4.395	558.7
167	263.00	.93900	1344.0	.9040-01	.1139	.1327	.9228	.6781-02	.4620-02	.8300	6.106	562.2
167	270.00	.80000-02	1304.0	.2305	.3010	.3253	.9378	.1661-01	.1177-01	1.857	14.50	582.1
167	270.00	.50000-01	1306.0	.2428	.3209	.3482	.9378	.1778-01	.1240-01	1.883	13.03	588.0
166	270.00	.75000-01	1307.0	.1705	.2172	.2328	.9378	.1189-01	.8711-02	1.502	10.49	569.5
167	270.00	.10000+00	1308.0	.2007	.2657	.2884	.9378	.1473-01	.1025-01	1.551	11.26	588.7
166	270.00	.11500	1345.0	.1460	.1892	.2254	.9228	.1152-01	.7460-02	1.213	8.849	579.3
166	277.00	.13600	1346.0	.4350-01	.5330-01	.6070-01	.9228	.3102-02	.2224-02	.4500	3.350	539.5
166	277.00	.30000	1347.0	.7390-01	.9060-01	.1034	.9228	.5282-02	.3775-02	.7570	5.728	541.2
167	277.00	.40000	1464.0	.6890-01	.8590-01	.9920-01	.9228	.5065-02	.3518-02	.6580	4.866	552.9
167	277.00	.60000	1466.0	.6410-01	.8050-01	.9350-01	.9228	.4776-02	.3272-02	.5940	4.376	558.5
167	277.00	.70000	1467.0	.6110-01	.7680-01	.8930-01	.9228	.4560-02	.3118-02	.5630	4.149	559.4
166	277.00	.75000	1348.0	.6200-01	.7670-01	.8800-01	.9228	.4498-02	.3168-02	.6140	4.546	548.2
166	277.00	.81500	1349.0	.6370-01	.7860-01	.9000-01	.9228	.4598-02	.3254-02	.6370	4.729	546.0
166	277.00	.83700	1350.0	.5780-01	.7140-01	.8180-01	.9228	.4181-02	.2955-02	.5770	4.279	546.6
166	277.00	.88400	1351.0	.5020-01	.6190-01	.7090-01	.9228	.3621-02	.2563-02	.5030	3.729	545.8
166	277.00	.89400	1352.0	.5170-01	.6390-01	.7330-01	.9228	.3743-02	.2640-02	.5130	3.801	547.6
167	277.00	.90000	1468.0	.5020-01	.6280-01	.7270-01	.9228	.3714-02	.2563-02	.4720	3.487	555.7
167	277.00	.90700	1353.0	.5120-01	.6410-01	.7420-01	.9228	.3790-02	.2614-02	.4810	3.550	556.0

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR63)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
167	277.00	.92100	1469.0	.5610-01	.7050-01	.8190-01	.9228	.4180-02	.2864-02	.5190	3.827	558.6
167	277.00	.92800	1470.0	.6120-01	.7700-01	.8960-01	.9228	.4574-02	.3126-02	.5640	4.153	559.6
167	277.00	.93700	1471.0	.6850-01	.8640-01	.1008	.9228	.5146-02	.3498-02	.6230	4.589	561.7
166	277.00	.93900	1354.0	.9470-01	.1198	.1400	.9228	.7152-02	.4837-02	.8560	6.291	564.9
167	335.00	.11000	1309.0	.1914	.2469	.2716	.9343	.1387-01	.9776-02	1.611	11.78	575.2
166	337.50	.74000	1355.0	.5000-01	.6100-01	.6940-01	.9221	.3549-02	.2556-02	.5280	3.936	535.4
166	337.50	.75000	1356.0	.4930-01	.6000-01	.6820-01	.9221	.3487-02	.2520-02	.5250	3.984	533.6
167	337.50	.76500	1357.0	.4820-01	.5910-01	.6770-01	.9221	.3457-02	.2463-02	.4930	3.735	539.6
167	337.50	.92500	1359.0	.5080-01	.6230-01	.7140-01	.9221	.3647-02	.2592-02	.5160	3.840	540.8
167	337.50	.93200	1360.0	.5390-01	.6630-01	.7600-01	.9221	.3883-02	.2753-02	.5450	4.053	541.9
167	337.50	.93900	1361.0	.6890-01	.8530-01	.9820-01	.9221	.5017-02	.3519-02	.6790	5.035	547.0

RIGHT SRB

PARAMETRIC DATA

ALPHA = 5.000 BETA = -5.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
174	5.030	-5.000	4.020	72.70	748.0	176.6	.4660	5.271	2618.	.2213-03	.1422-06	4.074
175	5.030	-5.000	4.020	72.80	747.0	176.6	.4670	5.280	2618.	.2217-03	.1422-06	4.082

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
174	.5112-01	.1139-01
175	.5116-01	.1138-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
175	.00000	.80000-02	1310.0	.2228	.2847	.3258	.9273	.1667-01	.1140-01	1.959	14.97	575.5
174	.00000	.25000-01	1311.0	.1252	.1560	.1757	.9273	.8982-02	.6398-02	1.209	8.765	558.6
174	.00000	.83700	1364.0	.3150-01	.3820-01	.4330-01	.9220	.2213-02	.1610-02	.3450	2.577	533.3
174	.00000	.88400	1365.0	.3760-01	.4540-01	.5130-01	.9220	.2623-02	.1920-02	.4180	3.125	530.0
174	.00000	.90700	1366.0	.4010-01	.4870-01	.5520-01	.9220	.2823-02	.2052-02	.4380	3.272	534.0
174	5.0000	.75000-01	1313.0	.9270-01	.1150	.1288	.9276	.6585-02	.4739-02	.9140	6.535	554.6
174	5.0000	.11000	1314.0	.1390-01	.1660-01	.1820-01	.9276	.9315-03	.7107-03	.1620	1.220	519.3
174	15.600	.95300	1431.0	.1128	.1416	.1585	.9291	.8102-02	.5765-02	1.059	7.784	563.9
174	20.000	.75000-01	1316.0	.1058	.1324	.1481	.9290	.7572-02	.5407-02	1.004	7.153	561.8
174	20.000	.10000+00	1318.0	.1273	.1603	.1800	.9290	.9200-02	.6507-02	1.181	8.672	566.1
174	20.000	.11000	1319.0	.1363	.1716	.1925	.9290	.9842-02	.6970-02	1.268	9.317	565.6
174	20.000	.95300	1432.0	.1018	.1268	.1410	.9296	.7209-02	.5202-02	.9840	7.254	558.4
175	22.500	.72400	1367.0	.3250-01	.3970-01	.4530-01	.9220	.2317-02	.1661-02	.3420	2.588	541.4
174	22.500	.74000	1368.0	.3250-01	.3950-01	.4500-01	.9220	.2299-02	.1660-02	.3480	2.596	537.7
174	22.500	.75000	1369.0	.3380-01	.4110-01	.4680-01	.9220	.2391-02	.1730-02	.3650	2.720	536.6
175	22.500	.76500	1370.0	.3040-01	.3700-01	.4210-01	.9220	.2153-02	.1553-02	.3250	2.463	538.1
175	22.500	.77100	1371.0	.3090-01	.3760-01	.4280-01	.9220	.2188-02	.1579-02	.3310	2.463	538.0
174	22.500	.92500	1372.0	.3490-01	.4220-01	.4790-01	.9220	.2447-02	.1785-02	.3850	2.876	531.9
174	22.500	.93900	1374.0	.3990-01	.4860-01	.5530-01	.9220	.2825-02	.2040-02	.4280	3.189	537.7
174	24.400	.95300	1433.0	.9420-01	.1176	.1305	.9300	.6671-02	.4814-02	.9050	6.666	559.6

IH72, RIGHT SRB CLEAN,

HU/HREF

(RVZR64)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
174	35.000	.75000-01	1321.0	.1172	.1479	.1647	.9306	.8417-02	.5993-02	1.079	7.667	567.4
174	35.000	.11000	1322.0	.1457	.1854	.2073	.9306	.1060-01	.7448-02	1.301	9.684	572.9
174	35.600	.95300	1434.0	.9600-01	.1204	.1330	.9313	.6800-02	.4908-02	.9060	6.661	563.0
174	40.000	.95300	1435.0	.1067	.1348	.1490	.9319	.7618-02	.5454-02	.9780	7.173	568.3
174	45.000	.74000	1375.0	.3630-01	.4430-01	.5050-01	.9220	.2583-02	.1858-02	.3860	2.918	540.0
174	45.000	.75000	1376.0	.3700-01	.4510-01	.5130-01	.9220	.2624-02	.1890-02	.3940	2.981	539.2
175	45.000	.76500	1377.0	.3450-01	.4220-01	.4820-01	.9220	.2467-02	.1766-02	.3630	2.695	542.1
175	45.000	.77100	1378.0	.3460-01	.4230-01	.4830-01	.9220	.2471-02	.1771-02	.3650	2.713	541.4
175	45.000	.88400	1381.0	.4030-01	.4900-01	.5570-01	.9220	.2849-02	.2062-02	.4350	3.242	536.5
175	45.000	.90700	1382.0	.4160-01	.5070-01	.5770-01	.9220	.2953-02	.2129-02	.4450	3.315	538.4
174	65.000	.11000	1323.0	.1738	.2268	.2504	.9345	.1280-01	.8884-02	1.421	10.16	587.6
174	67.500	.74000	1383.0	.4770-01	.5880-01	.6750-01	.9223	.3449-02	.2439-02	.4840	3.644	549.2
174	67.500	.75000	1384.0	.5220-01	.6450-01	.7410-01	.9223	.3786-02	.2670-02	.5270	3.965	550.3
175	67.500	.77100	1385.0	.4590-01	.5670-01	.6520-01	.9223	.3335-02	.2350-02	.4620	3.422	550.6
174	76.000	.10000+00	1324.0	.1668	.2202	.2418	.9360	.1236-01	.8528-02	1.316	9.536	593.2
174	76.000	.14100	1386.0	.3330-01	.4100-01	.4710-01	.9224	.2406-02	.1701-02	.3360	2.489	549.9
174	76.000	.14800	1387.0	.2820-01	.3480-01	.3980-01	.9224	.2037-02	.1443-02	.2870	2.127	548.6
174	76.000	.15500	1388.0	.2860-01	.3530-01	.4040-01	.9224	.2067-02	.1464-02	.2910	2.152	549.0
174	76.000	.16200	1389.0	.2960-01	.3650-01	.4190-01	.9224	.2140-02	.1515-02	.3010	2.228	549.0
174	76.000	.25000	1390.0	.4930-01	.6080-01	.6990-01	.9224	.3571-02	.2519-02	.4960	3.730	550.8
174	77.500	.95300	1436.0	.9260-01	.1244	.1365	.9370	.6978-02	.4734-02	.6930	4.999	601.2
174	77.500	.96700	1437.0	.1031	.1422	.1576	.9370	.8058-02	.5272-02	.7180	5.154	611.4
174	77.500	.99400	1439.0	.1103	.1516	.1678	.9370	.8579-02	.5637-02	.7740	5.559	610.3
175	90.000	.15000-01	1325.0	.1872	.2448	.2647	.9378	.1354-01	.9574-02	1.520	11.22	588.7
174	90.000	.25000-01	1326.0	.2203	.2967	.3242	.9378	.1657-01	.1126-01	1.633	11.59	602.5
175	90.000	.40000-01	1327.0	.2123	.2848	.3108	.9378	.1590-01	.1086-01	1.595	11.51	600.6
174	90.000	.60000-01	1328.0	.2375	.3176	.3462	.9378	.1770-01	.1214-01	1.800	12.19	599.3
174	90.000	.75000-01	1329.0	.1474	.1923	.2078	.9378	.1062-01	.7535-02	1.207	8.095	587.4
175	90.000	.13230	1479.0	.8510-01	.1067	.1238	.9228	.6335-02	.4352-02	.8020	5.899	563.1
175	90.000	.13390	1480.0	.6330-01	.7870-01	.9060-01	.9228	.4635-02	.3239-02	.6200	4.576	556.0
175	90.000	.13560	1481.0	.4660-01	.5770-01	.6620-01	.9228	.3389-02	.2384-02	.4640	3.428	552.9
175	90.000	.13730	1482.0	.3770-01	.4670-01	.5360-01	.9228	.2742-02	.1930-02	.3760	2.778	552.7
175	90.000	.13890	1483.0	.3330-01	.4120-01	.4730-01	.9228	.2422-02	.1706-02	.3330	2.460	552.3
175	90.000	.55000	1391.0	.6650-01	.8300-01	.9590-01	.9228	.4908-02	.3402-02	.6390	4.710	559.5
175	90.000	.65000	1392.0	.6250-01	.7820-01	.9050-01	.9228	.4632-02	.3199-02	.5960	4.391	561.0
174	90.000	.74000	1393.0	.9100-02	.1110-01	.1260-01	.9228	.6449-03	.4671-03	.9800-01	.7400	538.3
174	90.000	.76500	1394.0	.5820-01	.7270-01	.8400-01	.9228	.4293-02	.2976-02	.5590	4.122	559.5
174	90.000	.77100	1395.0	.5870-01	.7320-01	.8460-01	.9228	.4323-02	.2999-02	.5650	4.165	559.1
174	90.000	.81500	1396.0	.5850-01	.7320-01	.8480-01	.9228	.4335-02	.2992-02	.5570	4.173	561.3
174	90.000	.83700	1397.0	.5450-01	.6870-01	.7990-01	.9228	.4085-02	.2787-02	.5060	3.716	566.0
174	90.000	.88400	1398.0	.4040-01	.5050-01	.5850-01	.9228	.2988-02	.2065-02	.3850	2.839	560.8
174	90.000	.89400	1399.0	.6210-01	.7730-01	.8920-01	.9228	.4560-02	.3175-02	.6030	4.447	557.6
174	90.000	.90700	1400.0	.3930-01	.4940-01	.5740-01	.9228	.2936-02	.2010-02	.3680	2.703	564.6

IH72, RIGHT SRB CLEAN.

(RVZR64)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
174	90.000	.91700	1401.0	.3960-01	.4970-01	.5780-01	.9228	.2955-02	.2022-02	.3700	2.717	564.7
174	90.000	.93200	1402.0	.4820-01	.6090-01	.7090-01	.9228	.3626-02	.2466-02	.4450	3.265	567.2
174	90.000	.93900	1403.0	.7060-01	.9000-01	.1057	.9228	.5404-02	.3609-02	.6270	4.585	573.9
175	95.000	.13560	1484.0	.4750-01	.5910-01	.6810-01	.9230	.3482-02	.2431-02	.4630	3.420	556.7
175	95.000	.13890	1486.0	.3140-01	.3900-01	.4490-01	.9230	.2295-02	.1607-02	.3090	2.279	555.3
175	95.000	.14560	1487.0	.3080-01	.3830-01	.4400-01	.9230	.2253-02	.1575-02	.3010	2.224	556.1
175	95.000	.14730	1488.0	.3460-01	.4290-01	.4940-01	.9230	.2529-02	.1768-02	.3380	2.495	556.1
174	104.00	.10000+00	1330.0	.1746	.2360	.2554	.9392	.1305-01	.8924-02	1.282	9.241	603.9
174	104.00	.12000	1404.0	.7580-01	.9500-01	.1098	.9232	.5613-02	.3876-02	.7190	5.292	562.0
174	104.00	.12700	1405.0	.1144	.1469	.1734	.9232	.8863-02	.5847-02	.9860	7.197	578.9
174	104.00	.13400	1406.0	.4580-01	.5700-01	.6560-01	.9232	.3353-02	.2340-02	.4450	3.280	557.5
174	104.00	.14100	1407.0	.3930-01	.4890-01	.5620-01	.9232	.2875-02	.2011-02	.3840	2.833	556.6
174	104.00	.14800	1408.0	.3850-01	.4790-01	.5510-01	.9232	.2817-02	.1968-02	.3750	2.764	557.1
174	104.00	.15500	1409.0	.4200-01	.5230-01	.6020-01	.9232	.3078-02	.2145-02	.4060	2.996	558.1
174	104.00	.16200	1410.0	.4500-01	.5620-01	.6480-01	.9232	.3313-02	.2301-02	.4320	3.186	559.6
174	104.00	.17300	1411.0	.5690-01	.7150-01	.8290-01	.9232	.4240-02	.2907-02	.5310	3.899	565.0
174	104.00	.18000	1412.0	.6550-01	.8270-01	.9610-01	.9232	.4913-02	.3350-02	.6040	4.435	567.2
174	104.00	.18600	1413.0	.7090-01	.8950-01	.1042	.9232	.5326-02	.3623-02	.6500	4.771	568.1
174	104.00	.19300	1414.0	.7440-01	.9400-01	.1094	.9232	.5591-02	.3801-02	.6810	4.999	568.3
174	104.00	.20000	1415.0	.7610-01	.9620-01	.1121	.9232	.5732-02	.3889-02	.6940	5.090	569.1
174	104.00	.25000	1416.0	.7360-01	.9260-01	.1075	.9232	.5495-02	.3762-02	.6850	5.117	565.5
175	112.00	.13560	1489.0	.5050-01	.6310-01	.7270-01	.9234	.3720-02	.2581-02	.4830	3.555	560.4
175	112.00	.13730	1490.0	.4170-01	.5220-01	.6020-01	.9234	.3077-02	.2135-02	.3990	2.942	560.4
175	112.00	.13890	1491.0	.3700-01	.4630-01	.5340-01	.9234	.2732-02	.1892-02	.3520	2.594	561.2
175	112.00	.14560	1492.0	.8300-02	.1000-01	.1130-01	.9234	.5793-03	.4227-03	.9000-01	.6680	535.6
175	112.00	.14730	1493.0	.3280-01	.4070-01	.4680-01	.9234	.2392-02	.1675-02	.3200	2.362	556.4
174	112.50	.74000	1417.0	.7370-01	.9310-01	.1083	.9234	.5535-02	.3766-02	.6750	4.949	568.4
174	112.50	.75000	1418.0	.7200-01	.9100-01	.1058	.9234	.5406-02	.3681-02	.6610	4.846	568.1
175	112.50	.77100	1419.0	.6720-01	.8460-01	.9820-01	.9234	.5022-02	.3437-02	.6230	4.655	566.0
174	112.50	.92500	1420.0	.4930-01	.6290-01	.7370-01	.9234	.3770-02	.2520-02	.4350	3.181	574.9
174	112.50	.93200	1421.0	.5490-01	.7030-01	.8260-01	.9234	.4223-02	.2808-02	.4800	3.507	576.6
174	112.50	.93900	1422.0	.7960-01	.1027	.1215	.9234	.6210-02	.4071-02	.6770	4.932	581.3
174	112.50	.95300	1440.0	.5950-01	.8530-01	.9270-01	.9408	.4740-02	.3044-02	.3770	2.689	623.8
175	112.50	.96700	1441.0	.1453	.2237	.2485	.9408	.1271-01	.7433-02	.7930	5.611	640.8
175	112.50	.99400	1443.0	.1042	.1510	.1646	.9408	.8420-02	.5331-02	.6430	4.587	626.7
175	135.00	.80000-02	1331.0	.2515	.3455	.3715	.9406	.1901-01	.1286-01	1.767	13.36	610.1
174	135.00	.25000-01	1332.0	.2427	.3347	.3603	.9406	.1842-01	.1240-01	1.687	12.12	611.5
175	135.00	.50000-01	1333.0	.2488	.3427	.3688	.9406	.1887-01	.1273-01	1.736	12.47	611.0
174	135.00	.75000-01	1334.0	.1435	.1913	.2041	.9406	.1043-01	.7335-02	1.096	8.059	598.1
174	135.00	.10000+00	1335.0	.1704	.2321	.2490	.9406	.1273-01	.8709-02	1.224	8.810	607.0
174	135.00	.40000	1423.0	.7240-01	.9230-01	.1079	.9237	.5514-02	.3700-02	.6420	4.777	574.0
175	135.00	.92500	1424.0	.6470-01	.8540-01	.1027	.9237	.5252-02	.3310-02	.5110	3.703	593.0
175	140.00	.13560	1494.0	.4850-01	.6080-01	.7010-01	.9236	.3586-02	.2482-02	.4600	3.387	562.0

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR64)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
175	140.00	.13730	1495.0	.4350-01	.5450-01	.6290-01	.9236	.3216-02	.2225-02	.4120	3.032	562.2
175	140.00	.13890	1496.0	.4150-01	.5210-01	.6020-01	.9236	.3081-02	.2125-02	.3910	2.872	563.5
175	140.00	.14560	1497.0	.4700-01	.5910-01	.6840-01	.9236	.3497-02	.2405-02	.4400	3.231	564.6
175	150.00	.14230	1499.0	.4160-01	.5210-01	.6020-01	.9235	.3077-02	.2127-02	.3930	2.895	562.4
175	180.00	.80000-02	1298.0	.2712	.3758	.4150	.9378	.2123-01	.1387-01	1.862	14.07	613.2
175	180.00	.15000-01	1299.0	.1973	.2591	.2806	.9378	.1435-01	.1009-01	1.582	11.29	590.7
174	180.00	.25000-01	1300.0	.3089	.4123	.4491	.9378	.2296-01	.1579-01	2.352	16.19	598.6
175	180.00	.50000-01	1301.0	.2302	.3057	.3324	.9378	.1700-01	.1177-01	1.781	12.27	596.2
174	180.00	.75000-01	1302.0	.1440	.1875	.2025	.9378	.1035-01	.7360-02	1.186	8.082	586.4
175	180.00	.10000+00	1303.0	.1724	.2304	.2510	.9378	.1284-01	.8821-02	1.311	9.473	598.8
174	225.00	.98000	1425.0	.1158	.1515	.1698	.9325	.8681-02	.5920-02	.9390	6.816	589.0
174	225.00	.99400	1426.0	.1069	.1400	.1570	.9325	.8024-02	.5463-02	.8630	6.267	589.5
174	263.00	.13600	1336.0	.2830-01	.3430-01	.3880-01	.9220	.1983-02	.1449-02	.3140	2.344	531.1
175	263.00	.20000	1472.0	.1040-01	.1250-01	.1400-01	.9220	.7186-03	.5314-03	.1190	.8930	523.6
175	263.00	.30000	1337.0	.3440-01	.4150-01	.4690-01	.9220	.2398-02	.1760-02	.3860	2.937	528.2
175	263.00	.40000	1473.0	.3220-01	.3910-01	.4450-01	.9220	.2276-02	.1649-02	.3490	2.605	535.6
175	263.00	.50000	1474.0	.3180-01	.3860-01	.4380-01	.9220	.2243-02	.1629-02	.3470	2.588	534.4
175	263.00	.60000	1475.0	.3340-01	.4050-01	.4590-01	.9220	.2347-02	.1708-02	.3660	2.734	533.1
175	263.00	.75000	1338.0	.3290-01	.3970-01	.4490-01	.9220	.2299-02	.1682-02	.3650	2.731	530.3
175	263.00	.81500	1339.0	.3580-01	.4320-01	.4880-01	.9220	.2498-02	.1832-02	.4000	2.996	528.8
175	263.00	.83700	1340.0	.3320-01	.4020-01	.4550-01	.9220	.2326-02	.1701-02	.3690	2.758	530.5
175	263.00	.88400	1341.0	.3430-01	.4150-01	.4700-01	.9220	.2402-02	.1754-02	.3790	2.830	531.5
175	263.00	.89400	1342.0	.3400-01	.4120-01	.4670-01	.9220	.2387-02	.1739-02	.3730	2.787	532.8
175	263.00	.90700	1343.0	.3390-01	.4110-01	.4670-01	.9220	.2391-02	.1734-02	.3680	2.743	535.3
175	263.00	.92800	1477.0	.3600-01	.4390-01	.5000-01	.9220	.2556-02	.1842-02	.3850	2.863	538.7
174	263.00	.93900	1344.0	.4310-01	.5260-01	.5990-01	.9220	.3064-02	.2202-02	.4570	3.399	540.1
175	270.00	.80000-02	1304.0	.2020	.2561	.2916	.9273	.1492-01	.1033-01	1.828	14.35	570.5
175	270.00	.50000-01	1306.0	.1345	.1671	.1878	.9273	.9608-02	.6881-02	1.317	9.260	556.0
174	270.00	.75000-01	1307.0	.9680-01	.1201	.1348	.9273	.6889-02	.4948-02	.9550	6.715	554.6
175	270.00	.10000+00	1308.0	.1214	.1523	.1722	.9273	.8809-02	.6210-02	1.144	8.413	563.2
174	270.00	.11500	1345.0	.8870-01	.1114	.1300	.9220	.6644-02	.4535-02	.8330	6.125	563.9
174	277.00	.13600	1346.0	.2520-01	.3050-01	.3460-01	.9220	.1766-02	.1289-02	.2780	2.077	531.8
174	277.00	.30000	1347.0	.3350-01	.4030-01	.4550-01	.9220	.2328-02	.1713-02	.3780	2.882	526.7
175	277.00	.40000	1464.0	.3520-01	.4290-01	.4880-01	.9220	.2498-02	.1801-02	.3760	2.801	538.5
175	277.00	.60000	1466.0	.3550-01	.4320-01	.4910-01	.9220	.2511-02	.1819-02	.3840	2.867	536.0
175	277.00	.70000	1467.0	.2960-01	.3600-01	.4100-01	.9220	.2099-02	.1514-02	.3170	2.359	538.2
174	277.00	.75000	1348.0	.3160-01	.3810-01	.4300-01	.9220	.2199-02	.1615-02	.3540	2.651	528.2
174	277.00	.81500	1349.0	.3330-01	.4010-01	.4530-01	.9220	.2314-02	.1702-02	.3750	2.812	527.0
174	277.00	.83700	1350.0	.2970-01	.3590-01	.4060-01	.9220	.2076-02	.1520-02	.3310	2.473	530.0
174	277.00	.88400	1351.0	.3400-01	.4100-01	.4630-01	.9220	.2369-02	.1737-02	.3800	2.840	529.0
174	277.00	.89400	1352.0	.3170-01	.3830-01	.4340-01	.9220	.2218-02	.1620-02	.3500	2.617	531.4
175	277.00	.90000	1468.0	.3280-01	.3990-01	.4530-01	.9220	.2319-02	.1677-02	.3530	2.629	537.0
175	277.00	.90700	1353.0	.3450-01	.4190-01	.4770-01	.9220	.2442-02	.1763-02	.3700	2.754	537.7

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, RIGHT SRB CLEAN,

(RVZR64)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
175	277.00	.92100	1469.0	.3580-01	.4360-01	.4970-01	.9220	.2542-02	.1831-02	.3820	2.843	538.9
175	277.00	.92800	1470.0	.3860-01	.4720-01	.5390-01	.9220	.2755-02	.1977-02	.4080	3.034	541.0
174	277.00	.93700	1471.0	.4430-01	.5420-01	.6200-01	.9220	.3171-02	.2265-02	.4620	3.432	543.4
175	335.00	.93900	1354.0	.5820-01	.7150-01	.8190-01	.9220	.4188-02	.2976-02	.6000	4.449	546.0
174	337.50	.11000	1309.0	.1097	.1376	.1566	.9261	.8012-02	.5613-02	1.035	7.616	562.9
174	337.50	.74000	1355.0	.3370-01	.4110-01	.4680-01	.9220	.2390-02	.1725-02	.3610	2.692	538.0
175	337.50	.75000	1356.0	.3380-01	.4100-01	.4670-01	.9220	.2385-02	.1726-02	.3640	2.762	536.5
175	337.50	.76500	1357.0	.3590-01	.4380-01	.4990-01	.9220	.2554-02	.1838-02	.3820	2.893	539.5
175	337.50	.92500	1359.0	.5840-01	.7170-01	.8210-01	.9220	.4200-02	.2989-02	.6040	4.483	545.3
175	337.50	.93200	1360.0	.6460-01	.7940-01	.9110-01	.9220	.4661-02	.3305-02	.6620	4.911	547.0
175	337.50	.93900	1361.0	.7880-01	.9750-01	.1124 *	.9220	.5751-02	.4030-02	.7850	5.805	552.6

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR65)

RIGHT SRB

PARAMETRIC DATA

ALPHA = 5.000 BETA = .0000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
170	5.020	.0000	4.020	72.70	751.0	177.4	.4670	5.277	2623.	.2207-03	.1428-06	4.055
171	4.990	.0000	4.020	72.70	750.0	177.3	.4660	5.271	2623.	.2205-03	.1427-06	4.053

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
170	.5118-01	.1142-01
171	.5114-01	.1142-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
171	.00000	.80000-02	1310.0	.2265	.2802	.3140	.9274	.1606-01	.1158-01	2.265	17.48	554.7
170	.00000	.25000-01	1311.0	.1058	.1288	.1429	.9273	.7314-02	.5415-02	1.137	8.323	540.5
170	.00000	.83700	1364.0	.4310-01	.5230-01	.5950-01	.9220	.3045-02	.2206-02	.4690	3.492	538.1
170	.00000	.88400	1365.0	.5050-01	.6100-01	.6910-01	.9220	.3536-02	.2585-02	.5630	4.204	532.8
170	.00000	.90700	1366.0	.5030-01	.6120-01	.6960-01	.9220	.3561-02	.2576-02	.5450	4.056	539.1
170	5.0000	.75000-01	1313.0	.9750-01	.1193	.1328	.9274	.6797-02	.4990-02	1.023	7.350	545.5
170	5.0000	.11000	1314.0	.4120-01	.4930-01	.5420-01	.9274	.2774-02	.2106-02	.4770	3.581	523.9
170	15.600	.95300	1431.0	.1438	.1849	.2116	.9280	.1083-01	.7358-02	1.240	9.038	582.0
170	20.000	.75000-01	1316.0	.1016	.1248	.1392	.9276	.7122-02	.5197-02	1.045	7.493	549.4
170	20.000	.10000+00	1318.0	.1258	.1553	.1736	.9276	.8884-02	.6440-02	1.272	9.406	553.0
170	20.000	.11000	1319.0	.1305	.1609	.1796	.9276	.9192-02	.6677-02	1.327	9.812	551.9
170	20.000	.95300	1432.0	.1237	.1577	.1793	.9281	.9174-02	.6331-02	1.102	8.051	576.5
171	22.500	.72400	1367.0	.3910-01	.4760-01	.5430-01	.9220	.2776-02	.1999-02	.4180	3.161	541.1
170	22.500	.74000	1368.0	.4120-01	.5010-01	.5700-01	.9220	.2916-02	.2110-02	.4470	3.330	538.7
170	22.500	.75000	1369.0	.4170-01	.5060-01	.5760-01	.9220	.2946-02	.2134-02	.4530	3.378	538.1
171	22.500	.76500	1370.0	.4010-01	.4870-01	.5530-01	.9220	.2829-02	.2049-02	.4350	3.291	538.1
171	22.500	.77100	1371.0	.4130-01	.5010-01	.5700-01	.9220	.2914-02	.2110-02	.4480	3.335	538.0
170	22.500	.92500	1372.0	.4500-01	.5450-01	.6180-01	.9220	.3161-02	.2305-02	.4980	3.715	534.6
170	22.500	.93900	1374.0	.5700-01	.6940-01	.7910-01	.9220	.4046-02	.2918-02	.6130	4.568	540.6
170	24.400	.95300	1433.0	.1234	.1572	.1785	.9282	.9135-02	.6313-02	1.100	8.040	576.3

IH72, RIGHT SRB CLEAN,

(RVZR65)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
170	35.000	.75000-01	1321.0	.1120	.1375	.1529	.9281	.7823-02	.5729-02	1.156	8.289	548.8
170	35.000	.11000	1322.0	.1366	.1687	.1881	.9281	.9627-02	.6991-02	1.379	10.36	553.4
170	35.600	.95300	1434.0	.8860-01	.1112	.1249	.9287	.6390-02	.4534-02	.8360	6.138	566.3
170	40.000	.95300	1435.0	.7530-01	.9410-01	.1053	.9289	.5388-02	.3853-02	.7220	5.308	563.2
170	45.000	.74000	1375.0	.3170-01	.3840-01	.4360-01	.9220	.2229-02	.1624-02	.3500	2.659	534.8
171	45.000	.75000	1376.0	.3120-01	.3780-01	.4280-01	.9220	.2189-02	.1598-02	.3460	2.629	533.8
171	45.000	.76500	1377.0	.3040-01	.3680-01	.4180-01	.9220	.2136-02	.1556-02	.3360	2.505	534.5
171	45.000	.77100	1378.0	.3020-01	.3650-01	.4140-01	.9220	.2117-02	.1544-02	.3340	2.493	533.9
171	45.000	.88400	1381.0	.3320-01	.3980-01	.4490-01	.9220	.2295-02	.1696-02	.3810	2.853	525.8
171	45.000	.90700	1382.0	.3200-01	.3850-01	.4350-01	.9220	.2225-02	.1637-02	.3630	2.715	528.7
170	65.000	.11000	1323.0	.1581	.1965	.2179	.9298	.1115-01	.8090-02	1.552	11.25	558.7
170	67.500	.74000	1383.0	.4190-01	.5070-01	.5750-01	.9220	.2942-02	.2146-02	.4640	3.521	534.4
170	67.500	.75000	1384.0	.4030-01	.4880-01	.5530-01	.9220	.2831-02	.2062-02	.4440	3.372	535.0
171	67.500	.77100	1385.0	.3790-01	.4600-01	.5210-01	.9220	.2667-02	.1939-02	.4160	3.103	535.7
170	76.000	.10000+00	1324.0	.1622	.2024	.2239	.9307	.1146-01	.8300-02	1.567	11.53	561.8
170	76.000	.14100	1386.0	.2860-01	.3440-01	.3880-01	.9220	.1988-02	.1464-02	.3250	2.431	528.6
170	76.000	.14800	1387.0	.2470-01	.2960-01	.3340-01	.9220	.1710-02	.1263-02	.2830	2.121	526.5
170	76.000	.15500	1388.0	.2170-01	.2610-01	.2940-01	.9220	.1504-02	.1111-02	.2490	1.863	526.7
170	76.000	.16200	1389.0	.2020-01	.2430-01	.2730-01	.9220	.1399-02	.1034-02	.2320	1.736	526.5
170	76.000	.25000	1390.0	.3600-01	.4340-01	.4910-01	.9220	.2512-02	.1842-02	.4050	3.075	531.0
170	77.500	.95300	1436.0	.9470-01	.1179	.1297	.9315	.6639-02	.4848-02	.9250	6.813	559.8
170	77.500	.96700	1437.0	.1113	.1397	.1542	.9315	.7892-02	.5696-02	1.053	7.734	565.7
170	77.500	.99400	1439.0	.1216	.1544	.1715	.9315	.8777-02	.6225-02	1.101	8.056	573.7
171	90.000	.15000-01	1325.0	.1693	.2089	.2282	.9319	.1167-01	.8657-02	1.712	12.87	552.5
170	90.000	.25000-01	1326.0	.1737	.2177	.2397	.9319	.1227-01	.8888-02	1.649	11.92	565.0
171	90.000	.40000-01	1327.0	.1699	.2116	.2323	.9319	.1188-01	.8688-02	1.652	12.17	560.0
170	90.000	.60000-01	1328.0	.1938	.2429	.2674	.9319	.1368-01	.9918-02	1.842	12.69	564.8
170	90.000	.75000-01	1329.0	.1392	.1728	.1893	.9319	.9688-02	.7123-02	1.375	9.360	557.6
171	90.000	.13230	1479.0	.6940-01	.8450-01	.9630-01	.9220	.4923-02	.3547-02	.7420	5.522	540.9
171	90.000	.13390	1480.0	.5050-01	.6110-01	.6920-01	.9220	.3541-02	.2580-02	.5570	4.153	534.5
171	90.000	.13560	1481.0	.3810-01	.4590-01	.5190-01	.9220	.2653-02	.1946-02	.4270	3.196	530.6
171	90.000	.13730	1482.0	.3670-01	.4420-01	.5000-01	.9220	.2558-02	.1876-02	.4120	3.079	530.7
171	90.000	.13890	1483.0	.2840-01	.3420-01	.3860-01	.9220	.1974-02	.1454-02	.3230	2.414	528.3
171	90.000	.55000	1391.0	.5080-01	.6130-01	.6920-01	.9220	.3541-02	.2599-02	.5720	4.280	530.1
171	90.000	.65000	1392.0	.4930-01	.5980-01	.6780-01	.9220	.3469-02	.2520-02	.5390	4.020	536.3
170	90.000	.74000	1393.0	.1150-01	.1390-01	.1580-01	.9220	.8062-03	.5895-03	.1280	.9750	532.8
170	90.000	.76500	1394.0	.5430-01	.6580-01	.7470-01	.9220	.3822-02	.2776-02	.5940	4.428	536.6
170	90.000	.77100	1395.0	.5460-01	.6620-01	.7510-01	.9220	.3844-02	.2794-02	.5990	4.463	536.3
170	90.000	.81500	1396.0	.5310-01	.6430-01	.7290-01	.9220	.3731-02	.2716-02	.5840	4.433	535.4
170	90.000	.83700	1397.0	.5380-01	.6510-01	.7390-01	.9220	.3780-02	.2752-02	.5930	4.420	535.3
170	90.000	.88400	1398.0	.4430-01	.5340-01	.6030-01	.9220	.3087-02	.2268-02	.5000	3.742	530.0
170	90.000	.89400	1399.0	.4620-01	.5550-01	.6270-01	.9220	.3207-02	.2362-02	.5250	3.929	528.3
170	90.000	.90700	1400.0	.4570-01	.5520-01	.6250-01	.9220	.3197-02	.2338-02	.5090	3.804	532.7

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR65)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
170	90.000	.91700	1401.0	.4500-01	.5440-01	.6160-01	.9220	.3155-02	.2305-02	.5010	3.742	533.2
170	90.000	.93200	1402.0	.4810-01	.5820-01	.6610-01	.9220	.3381-02	.2460-02	.5290	3.943	535.6
170	90.000	.93900	1403.0	.6040-01	.7350-01	.8370-01	.9220	.4282-02	.3093-02	.6520	4.853	539.8
171	95.000	.13560	1484.0	.4300-01	.5200-01	.5890-01	.9220	.3012-02	.2198-02	.4750	3.548	533.9
171	95.000	.13890	1486.0	.3100-01	.3740-01	.4220-01	.9220	.2160-02	.1584-02	.3470	2.594	531.0
171	95.000	.14560	1487.0	.2270-01	.2730-01	.3080-01	.9220	.1577-02	.1159-02	.2550	1.911	529.7
171	95.000	.14730	1488.0	.2450-01	.2950-01	.3330-01	.9220	.1705-02	.1252-02	.2760	2.063	529.9
170	104.00	.10000+00	1330.0	.1743	.2208	.2425	.9332	.1241-01	.8920-02	1.589	11.64	572.4
170	104.00	.12000	1404.0	.6220-01	.7560-01	.8600-01	.9221	.4402-02	.3184-02	.6730	5.013	539.1
170	104.00	.12700	1405.0	.9710-01	.1201	.1385	.9221	.7087-02	.4968-02	.9720	7.182	554.9
170	104.00	.13400	1406.0	.4040-01	.4890-01	.5540-01	.9221	.2833-02	.2069-02	.4490	3.352	533.6
170	104.00	.14100	1407.0	.3350-01	.4040-01	.4570-01	.9221	.2339-02	.1714-02	.3750	2.803	531.7
170	104.00	.14800	1408.0	.2700-01	.3250-01	.3680-01	.9221	.1883-02	.1380-02	.3030	2.262	531.3
170	104.00	.15500	1409.0	.2510-01	.3030-01	.3420-01	.9221	.1750-02	.1283-02	.2810	2.101	531.5
170	104.00	.16200	1410.0	.2790-01	.3370-01	.3810-01	.9221	.1949-02	.1429-02	.3130	2.342	531.3
170	104.00	.17300	1411.0	.2950-01	.3570-01	.4040-01	.9221	.2067-02	.1510-02	.3280	2.452	533.2
170	104.00	.18000	1412.0	.3070-01	.3720-01	.4210-01	.9221	.2154-02	.1571-02	.3400	2.534	534.4
170	104.00	.18600	1413.0	.3380-01	.4090-01	.4640-01	.9221	.2373-02	.1729-02	.3730	2.779	535.1
170	104.00	.19300	1414.0	.3850-01	.4660-01	.5290-01	.9221	.2708-02	.1970-02	.4230	3.153	535.9
170	104.00	.20000	1415.0	.4280-01	.5200-01	.5910-01	.9221	.3023-02	.2192-02	.4670	3.475	537.9
170	104.00	.25000	1416.0	.5840-01	.7090-01	.8050-01	.9221	.4120-02	.2986-02	.6350	4.809	538.0
171	112.00	.13560	1489.0	.4500-01	.5460-01	.6200-01	.9221	.3168-02	.2301-02	.4910	3.663	536.7
171	112.00	.13730	1490.0	.3700-01	.4480-01	.5080-01	.9221	.2600-02	.1892-02	.4060	3.025	535.8
171	112.00	.13890	1491.0	.3460-01	.4190-01	.4750-01	.9221	.2429-02	.1770-02	.3810	2.842	534.9
171	112.00	.14560	1492.0	.7800-02	.9500-02	.1070-01	.9221	.5460-03	.4012-03	.8800-01	.6610	529.9
171	112.00	.14730	1493.0	.2470-01	.2980-01	.3380-01	.9221	.1729-02	.1261-02	.2720	2.031	534.4
170	112.50	.74000	1417.0	.5200-01	.6400-01	.7350-01	.9221	.3760-02	.2662-02	.5330	3.947	550.3
170	112.50	.75000	1418.0	.5110-01	.6280-01	.7200-01	.9221	.3685-02	.2614-02	.5260	3.893	549.5
171	112.50	.77100	1419.0	.4930-01	.6040-01	.6910-01	.9221	.3535-02	.2522-02	.5140	3.877	546.3
170	112.50	.92500	1420.0	.4760-01	.5790-01	.6590-01	.9221	.3371-02	.2434-02	.5120	3.810	540.2
170	112.50	.93200	1421.0	.5040-01	.6140-01	.6990-01	.9221	.3576-02	.2580-02	.5410	4.025	540.8
170	112.50	.93900	1422.0	.6350-01	.7760-01	.8850-01	.9221	.4529-02	.3250-02	.6720	4.995	543.6
170	112.50	.95300	1440.0	.1249	.1598	.1746	.9348	.8934-02	.6393-02	1.100	8.030	578.5
171	112.50	.96700	1441.0	.1753	.2241	.2448	.9348	.1252-01	.8967-02	1.545	11.28	577.9
171	112.50	.99400	1443.0	.1302	.1692	.1861	.9348	.9516-02	.6661-02	1.086	7.892	587.2
171	135.00	.80000-02	1331.0	.2597	.3345	.3639	.9360	.1861-01	.1328-01	2.230	17.10	582.3
170	135.00	.25000-01	1332.0	.2108	.2729	.2975	.9360	.1522-01	.1079-01	1.780	12.95	585.6
171	135.00	.50000-01	1333.0	.2161	.2769	.3006	.9360	.1537-01	.1105-01	1.890	13.79	579.2
170	135.00	.75000-01	1334.0	.1447	.1838	.1988	.9360	.1018-01	.7403-02	1.306	9.713	574.2
170	135.00	.10000+00	1335.0	.1832	.2358	.2564	.9360	.1312-01	.9376-02	1.579	11.50	582.2
170	135.00	.40000	1423.0	.5810-01	.7260-01	.8420-01	.9224	.4310-02	.2972-02	.5580	4.172	563.0
171	135.00	.92500	1424.0	.6080-01	.7570-01	.8760-01	.9224	.4480-02	.3109-02	.5910	4.356	560.0
171	140.00	.13560	1494.0	.4610-01	.5610-01	.6380-01	.9225	.3265-02	.2355-02	.4920	3.656	541.5

IH72, RIGHT SRB CLEAN,

(RVZR65)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
171	140.00	.13730	1495.0	.3960-01	.4820-01	.5480-01	.9225	.2805-02	.2024-02	.4230	3.145	541.3
171	140.00	.13890	1496.0	.3800-01	.4630-01	.5270-01	.9225	.2693-02	.1943-02	.4050	3.015	541.5
171	140.00	.14560	1497.0	.4220-01	.5140-01	.5840-01	.9225	.2985-02	.2158-02	.4530	3.368	540.4
171	150.00	.14230	1499.0	.3620-01	.4410-01	.5000-01	.9226	.2559-02	.1849-02	.3870	2.875	541.1
171	180.00	.80000-02	1298.0	.2811	.3698	.4006	.9378	.2049-01	.1438-01	2.249	17.15	593.8
170	180.00	.15000-01	1299.0	.1832	.2321	.2482	.9378	.1269-01	.9368-02	1.668	12.01	572.1
171	180.00	.25000-01	1300.0	.2742	.3500	.3752	.9379	.1920-01	.1403-01	2.431	16.91	577.3
170	180.00	.50000-01	1301.0	.2388	.3073	.3304	.9378	.1690-01	.1221-01	2.053	14.25	582.0
171	180.00	.75000-01	1302.0	.1436	.1834	.1966	.9379	.1006-01	.7350-02	1.272	8.710	577.5
170	180.00	.10000+00	1303.0	.1937	.2528	.2731	.9378	.1397-01	.9906-02	1.589	11.53	589.8
170	225.00	.98000	1425.0	.1441	.1979	.2194	.9368	.1123-01	.7374-02	1.018	7.309	612.5
170	225.00	.99400	1426.0	.1186	.1611	.1780	.9368	.9108-02	.6068-02	.8620	6.199	608.5
170	263.00	.13600	1336.0	.3970-01	.4790-01	.5420-01	.9220	.2776-02	.2033-02	.4450	3.323	531.8
171	263.00	.20000	1472.0	.3070-01	.3670-01	.4130-01	.9220	.2113-02	.1568-02	.3550	2.665	523.6
171	263.00	.30000	1337.0	.5840-01	.7050-01	.7970-01	.9220	.4078-02	.2988-02	.6540	4.974	531.2
171	263.00	.40000	1473.0	.5480-01	.6660-01	.7580-01	.9220	.3876-02	.2802-02	.5920	4.404	539.1
171	263.00	.50000	1474.0	.5060-01	.6140-01	.6960-01	.9220	.3562-02	.2590-02	.5550	4.141	535.8
171	263.00	.60000	1475.0	.5270-01	.6380-01	.7230-01	.9220	.3696-02	.2695-02	.5820	4.345	534.2
171	263.00	.75000	1338.0	.5440-01	.6550-01	.7390-01	.9220	.3779-02	.2783-02	.6180	4.623	528.2
171	263.00	.81500	1339.0	.5590-01	.6690-01	.7530-01	.9220	.3849-02	.2858-02	.6490	4.874	523.0
171	263.00	.83700	1340.0	.4900-01	.5890-01	.6630-01	.9220	.3391-02	.2506-02	.5610	4.206	526.2
171	263.00	.88400	1341.0	.4810-01	.5780-01	.6510-01	.9220	.3330-02	.2458-02	.5490	4.115	526.7
171	263.00	.89400	1342.0	.4730-01	.5690-01	.6420-01	.9220	.3281-02	.2417-02	.5370	4.019	528.1
171	263.00	.90700	1343.0	.4840-01	.5840-01	.6610-01	.9220	.3378-02	.2473-02	.5400	4.034	531.9
171	263.00	.92800	1477.0	.5270-01	.6370-01	.7220-01	.9220	.3692-02	.2696-02	.5850	4.365	533.3
170	263.00	.93900	1344.0	.7310-01	.8900-01	.1013	.9220	.5186-02	.3741-02	.7860	5.850	540.4
171	270.00	.80000-02	1304.0	.2311	.2894	.3185	.9319	.1629-01	.1182-01	2.201	17.34	564.0
171	270.00	.50000-01	1306.0	.1916	.2390	.2624	.9319	.1342-01	.9799-02	1.855	13.01	560.9
170	270.00	.75000-01	1307.0	.1448	.1800	.1973	.9319	.1010-01	.7411-02	1.423	9.990	558.6
171	270.00	.10000+00	1308.0	.1729	.2180	.2408	.9319	.1231-01	.8842-02	1.602	11.75	569.1
170	270.00	.11500	1345.0	.1267	.1600	.1877	.9220	.9606-02	.6482-02	1.167	8.551	570.6
170	277.00	.13600	1346.0	.3360-01	.4050-01	.4570-01	.9220	.2338-02	.1721-02	.3820	2.855	528.9
170	277.00	.30000	1347.0	.5370-01	.6440-01	.7260-01	.9220	.3714-02	.2748-02	.6180	4.714	525.5
171	277.00	.40000	1464.0	.4890-01	.5910-01	.6680-01	.9220	.3417-02	.2503-02	.5470	4.090	531.5
171	277.00	.60000	1466.0	.5420-01	.6510-01	.7340-01	.9220	.3752-02	.2769-02	.6190	4.635	526.8
171	277.00	.70000	1467.0	.5170-01	.6230-01	.7050-01	.9220	.3603-02	.2644-02	.5810	4.345	530.4
170	277.00	.75000	1348.0	.5490-01	.6570-01	.7390-01	.9220	.3784-02	.2807-02	.6370	4.776	523.8
170	277.00	.81500	1349.0	.5580-01	.6660-01	.7480-01	.9220	.3827-02	.2853-02	.6570	4.937	520.4
170	277.00	.83700	1350.0	.5490-01	.6580-01	.7400-01	.9220	.3785-02	.2812-02	.6400	4.807	522.9
170	277.00	.88400	1351.0	.4780-01	.5710-01	.6400-01	.9220	.3276-02	.2446-02	.5650	4.250	519.5
170	277.00	.89400	1352.0	.4800-01	.5740-01	.6450-01	.9220	.3303-02	.2457-02	.5610	4.215	522.1
171	277.00	.90000	1468.0	.4920-01	.5890-01	.6630-01	.9220	.3390-02	.2516-02	.5710	4.284	523.3
171	277.00	.90700	1353.0	.4830-01	.5790-01	.6520-01	.9220	.3333-02	.2472-02	.5600	4.199	523.8

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR65)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
171	277.00	.92100	1469.0	.5100-01	.6120-01	.6890-01	.9220	.3525-02	.2606-02	.5850	4.381	525.9
171	277.00	.92800	1470.0	.5070-01	.6090-01	.6870-01	.9220	.3515-02	.2592-02	.5780	4.327	527.3
171	277.00	.93700	1471.0	.5360-01	.6460-01	.7290-01	.9220	.3729-02	.2740-02	.6050	4.524	529.5
170	277.00	.93900	1354.0	.6730-01	.8160-01	.9270-01	.9220	.4743-02	.3443-02	.7350	5.481	537.0
171	335.00	.11000	1309.0	.1390	.1718	.1920	.9277	.9821-02	.7108-02	1.395	10.31	553.9
170	337.50	.74000	1355.0	.4210-01	.5080-01	.5750-01	.9220	.2945-02	.2152-02	.4680	3.496	533.1
170	337.50	.75000	1356.0	.3850-01	.4650-01	.5260-01	.9220	.2693-02	.1973-02	.4320	3.280	531.8
171	337.50	.76500	1357.0	.3900-01	.4700-01	.5310-01	.9220	.2715-02	.1993-02	.4390	3.336	530.1
171	337.50	.92500	1359.0	.4620-01	.5580-01	.6320-01	.9220	.3231-02	.2363-02	.5150	3.844	532.4
171	337.50	.93200	1360.0	.4850-01	.5870-01	.6650-01	.9220	.3403-02	.2482-02	.5360	4.004	534.0
171	337.50	.93900	1361.0	.6270-01	.7640-01	.8700-01	.9220	.4451-02	.3206-02	.6710	4.988	541.0

RIGHT SRB

IH72, RIGHT SRB CLEAN, HU/HREF

(RVZR66)

PARAMETRIC DATA

ALPHA = 5.000 BETA = 5.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
172	5.030	5.000	4.020	72.70	749.0	177.0	.4660	5.275	2621.	.2210-03	.1425-06	4.064
173	5.050	5.000	4.020	72.70	748.0	176.8	.4660	5.275	2619.	.2213-03	.1423-06	4.072

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
172	.5115-01	.1140-01
173	.5114-01	.1140-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
173	.00000	.80000-02	1310.0	.2237	.2776	.3119	.9273	.1595-01	.1144-01	2.200	16.98	555.8
172	.00000	.25000-01	1311.0	.1108	.1362	.1521	.9273	.7781-02	.5665-02	1.135	8.270	548.9
172	.00000	.83700	1364.0	.2550-01	.3080-01	.3480-01	.9220	.1780-02	.1304-02	.2850	2.133	530.5
172	.00000	.88400	1365.0	.3020-01	.3640-01	.4110-01	.9220	.2100-02	.1546-02	.3420	2.563	527.8
172	.00000	.90700	1366.0	.3130-01	.3790-01	.4290-01	.9220	.2194-02	.1602-02	.3470	2.592	532.6
172	5.0000	.75000-01	1313.0	.8750-01	.1070	.1191	.9270	.6094-02	.4477-02	.9230	6.636	543.1
172	5.0000	.11000	1314.0	.7080-01	.8670-01	.9680-01	.9270	.4949-02	.3622-02	.7390	5.484	545.2
172	15.600	.95300	1431.0	.1581	.2000	.2278	.9269	.1165-01	.8089-02	1.448	10.61	570.2
172	20.000	.75000-01	1316.0	.9490-01	.1165	.1307	.9263	.6683-02	.4853-02	.9790	7.023	547.5
172	20.000	.10000+00	1318.0	.1113	.1372	.1542	.9263	.7890-02	.5695-02	1.131	8.372	550.6
172	20.000	.11000	1319.0	.1133	.1396	.1568	.9263	.8022-02	.5796-02	1.154	8.545	550.1
172	20.000	.95300	1432.0	.1706	.2171	.2486	.9267	.1271-01	.8728-02	1.528	11.18	574.1
173	22.500	.72400	1367.0	.2810-01	.3420-01	.3900-01	.9220	.1993-02	.1437-02	.3000	2.275	539.1
172	22.500	.74000	1368.0	.2940-01	.3560-01	.4050-01	.9220	.2069-02	.1503-02	.3210	2.391	535.8
172	22.500	.75000	1369.0	.3120-01	.3780-01	.4290-01	.9220	.2194-02	.1597-02	.3430	2.562	534.3
173	22.500	.76500	1370.0	.2820-01	.3420-01	.3880-01	.9220	.1985-02	.1441-02	.3070	2.327	535.4
173	22.500	.77100	1371.0	.2960-01	.3590-01	.4070-01	.9220	.2084-02	.1513-02	.3220	2.404	535.2
172	22.500	.92500	1372.0	.4840-01	.5870-01	.6660-01	.9220	.3409-02	.2474-02	.5270	3.927	536.3
172	22.500	.93900	1374.0	.7200-01	.8790-01	.1003	.9220	.5129-02	.3681-02	.7620	5.662	542.3
172	24.400	.95300	1433.0	.1830	.2359	.2729	.9266	.1396-01	.9361-02	1.563	11.39	582.2

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR66)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
172	35.000	.75000-01	1321.0	.8890-01	.1092	.1226	.9259	.6273-02	.4549-02	.9190	6.596	547.1
172	35.000	.11000	1322.0	.1059	.1305	.1470	.9259	.7521-02	.5415-02	1.074	8.083	550.9
172	35.600	.95300	1434.0	.1845	.2415	.2829	.9263	.1447-01	.9439-02	1.498	10.87	590.5
172	40.000	.95300	1435.0	.1892	.2492	.2933	.9263	.1500-01	.9677-02	1.505	10.90	593.7
172	45.000	.74000	1375.0	.4730-01	.5790-01	.6630-01	.9220	.3391-02	.2418-02	.4920	3.715	545.6
172	45.000	.75000	1376.0	.4640-01	.5680-01	.6500-01	.9220	.3325-02	.2374-02	.4850	3.662	544.9
173	45.000	.76500	1377.0	.4810-01	.5900-01	.6760-01	.9220	.3456-02	.2459-02	.4980	3.692	545.8
173	45.000	.77100	1378.0	.4760-01	.5840-01	.6680-01	.9220	.3418-02	.2436-02	.4950	3.675	545.0
173	45.000	.88400	1381.0	.6600-01	.8020-01	.9120-01	.9220	.4665-02	.3374-02	.7110	5.302	537.3
173	45.000	.90700	1382.0	.6960-01	.8480-01	.9650-01	.9220	.4938-02	.3558-02	.7430	5.533	539.3
172	65.000	.11000	1323.0	.1115	.1375	.1547	.9261	.7914-02	.5703-02	1.131	8.231	550.9
172	67.500	.74000	1383.0	.3490-01	.4250-01	.4840-01	.9220	.2478-02	.1787-02	.3750	2.837	539.5
172	67.500	.75000	1384.0	.3440-01	.4190-01	.4770-01	.9220	.2441-02	.1759-02	.3680	2.781	540.2
173	67.500	.77100	1385.0	.3670-01	.4480-01	.5120-01	.9220	.2617-02	.1875-02	.3860	2.867	542.4
172	76.000	.10000+00	1324.0	.1135	.1400	.1572	.9265	.8039-02	.5807-02	1.152	8.524	550.9
172	76.000	.14100	1386.0	.2170-01	.2620-01	.2960-01	.9220	.1513-02	.1109-02	.2430	1.815	530.4
172	76.000	.14800	1387.0	.1760-01	.2120-01	.2400-01	.9220	.1227-02	.9026-03	.1990	1.493	528.3
172	76.000	.15500	1388.0	.1560-01	.1870-01	.2110-01	.9220	.1082-02	.7969-03	.1770	1.324	527.3
172	76.000	.16200	1389.0	.1400-01	.1680-01	.1900-01	.9220	.9717-03	.7163-03	.1590	1.193	526.9
172	77.500	.95300	1436.0	.1614	.2057	.2353	.9271	.1203-01	.8256-02	1.437	10.50	575.2
172	77.500	.96700	1437.0	.1298	.1633	.1852	.9271	.9473-02	.6637-02	1.211	8.894	566.7
172	77.500	.99400	1439.0	.8200-01	.1033	.1172	.9271	.5994-02	.4197-02	.7650	5.613	567.0
173	90.000	.15000-01	1325.0	.1358	.1659	.1844	.9273	.9429-02	.6947-02	1.436	10.86	541.5
172	90.000	.25000-01	1326.0	.1244	.1537	.1721	.9273	.8803-02	.6365-02	1.252	9.105	552.5
173	90.000	.40000-01	1327.0	.1325	.1622	.1807	.9273	.9241-02	.6774-02	1.381	10.25	544.4
172	90.000	.60000-01	1328.0	.1272	.1565	.1747	.9273	.8936-02	.6509-02	1.306	9.070	548.6
172	90.000	.75000-01	1329.0	.9790-01	.1200	.1337	.9273	.6840-02	.5010-02	1.020	6.986	545.6
173	90.000	.13230	1479.0	.4960-01	.6030-01	.6850-01	.9220	.3505-02	.2536-02	.5350	3.987	537.2
173	90.000	.13390	1480.0	.3830-01	.4630-01	.5250-01	.9220	.2687-02	.1959-02	.4220	3.151	532.8
173	90.000	.13560	1481.0	.2780-01	.3350-01	.3790-01	.9220	.1938-02	.1420-02	.3100	2.322	529.7
173	90.000	.13730	1482.0	.2860-01	.3450-01	.3900-01	.9220	.1993-02	.1465-02	.3230	2.415	527.9
173	90.000	.13890	1483.0	.2170-01	.2610-01	.2950-01	.9220	.1509-02	.1110-02	.2450	1.834	527.5
173	90.000	.55000	1391.0	.3180-01	.3850-01	.4360-01	.9220	.2231-02	.1624-02	.3480	2.600	533.7
173	90.000	.65000	1392.0	.3460-01	.4210-01	.4790-01	.9220	.2449-02	.1769-02	.3720	2.770	538.0
172	90.000	.76500	1394.0	.2880-01	.3490-01	.3970-01	.9220	.2033-02	.1471-02	.3110	2.319	537.6
172	90.000	.77100	1395.0	.3020-01	.3670-01	.4170-01	.9220	.2133-02	.1545-02	.3280	2.442	537.1
172	90.000	.81500	1396.0	.3070-01	.3730-01	.4240-01	.9220	.2170-02	.1573-02	.3340	2.531	536.9
172	90.000	.83700	1397.0	.3260-01	.3960-01	.4500-01	.9220	.2301-02	.1669-02	.3550	2.644	536.6
172	90.000	.88400	1398.0	.3130-01	.3790-01	.4290-01	.9220	.2195-02	.1602-02	.3470	2.591	532.7
172	90.000	.89400	1399.0	.3050-01	.3680-01	.4160-01	.9220	.2130-02	.1559-02	.3400	2.542	531.1
172	90.000	.90700	1400.0	.3030-01	.3670-01	.4160-01	.9220	.2130-02	.1549-02	.3320	2.478	534.8
172	90.000	.91700	1401.0	.3290-01	.3990-01	.4530-01	.9220	.2319-02	.1685-02	.3600	2.684	535.6
172	90.000	.93200	1402.0	.3430-01	.4160-01	.4730-01	.9220	.2422-02	.1753-02	.3710	2.766	537.5

IH72, RIGHT SRB CLEAN,

(RVZR66)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
172	90.000	.93900	1403.0	.4450-01	.5430-01	.6200-01	.9220	.3170-02	.2277-02	.4730	3.513	541.7
173	95.000	.13560	1484.0	.3020-01	.3650-01	.4130-01	.9220	.2110-02	.1543-02	.3350	2.505	531.0
173	95.000	.13890	1486.0	.2270-01	.2730-01	.3090-01	.9220	.1580-02	.1160-02	.2540	1.904	528.8
173	95.000	.14560	1487.0	.2190-01	.2640-01	.2980-01	.9220	.1523-02	.1121-02	.2480	1.859	526.9
172	104.00	.14730	1488.0	.1940-01	.2340-01	.2630-01	.9220	.1348-02	.9939-03	.2210	1.657	525.8
172	104.00	.10000+00	1330.0	.1442	.1786	.1992	.9284	.1019-01	.7374-02	1.431	10.57	555.1
172	104.00	.12000	1404.0	.4310-01	.5230-01	.5940-01	.9220	.3036-02	.2202-02	.4690	3.493	536.5
172	104.00	.12700	1405.0	.7180-01	.8810-01	.1009	.9220	.5163-02	.3672-02	.7430	5.510	546.9
172	104.00	.13400	1406.0	.2760-01	.3330-01	.3770-01	.9220	.1931-02	.1412-02	.3070	2.297	531.6
172	104.00	.14100	1407.0	.2330-01	.2810-01	.3170-01	.9220	.1622-02	.1190-02	.2610	1.954	529.7
172	104.00	.14800	1408.0	.1910-01	.2300-01	.2600-01	.9220	.1330-02	.9794-03	.2170	1.625	527.7
172	104.00	.15500	1409.0	.1760-01	.2120-01	.2390-01	.9220	.1224-02	.9026-03	.2010	1.504	526.7
172	104.00	.16200	1410.0	.1700-01	.2050-01	.2310-01	.9220	.1182-02	.8718-03	.1940	1.456	526.3
172	104.00	.17300	1411.0	.1390-01	.1670-01	.1890-01	.9220	.9664-03	.7117-03	.1580	1.182	527.5
172	104.00	.18000	1412.0	.1420-01	.1710-01	.1930-01	.9220	.9864-03	.7258-03	.1610	1.202	528.0
172	104.00	.18600	1413.0	.1400-01	.1690-01	.1900-01	.9220	.9730-03	.7160-03	.1580	1.186	528.0
172	104.00	.19300	1414.0	.1480-01	.1780-01	.2010-01	.9220	.1026-02	.7550-03	.1670	1.252	527.8
172	104.00	.20000	1415.0	.1500-01	.1800-01	.2040-01	.9220	.1042-02	.7660-03	.1690	1.265	528.6
172	104.00	.25000	1416.0	.3000-01	.3620-01	.4090-01	.9220	.2093-02	.1533-02	.3340	2.543	531.0
173	112.00	.13560	1489.0	.3680-01	.4450-01	.5050-01	.9220	.2583-02	.1880-02	.4030	3.010	533.8
173	112.00	.13730	1490.0	.3040-01	.3680-01	.4170-01	.9220	.2131-02	.1557-02	.3370	2.518	531.7
173	112.00	.13890	1491.0	.2610-01	.3150-01	.3570-01	.9220	.1825-02	.1335-02	.2900	2.169	530.9
173	112.00	.14560	1492.0	.6700-02	.8100-02	.9200-02	.9220	.4696-03	.3446-03	.7600-01	.5660	528.9
173	112.00	.14730	1493.0	.1780-01	.2160-01	.2440-01	.9220	.1250-02	.9124-03	.1970	1.474	531.9
172	112.50	.74000	1417.0	.3190-01	.3870-01	.4400-01	.9220	.2248-02	.1632-02	.3480	2.596	535.9
172	112.50	.75000	1418.0	.3280-01	.3980-01	.4520-01	.9220	.2313-02	.1679-02	.3580	2.671	535.9
173	112.50	.77100	1419.0	.3140-01	.3800-01	.4320-01	.9220	.2207-02	.1604-02	.3430	2.600	534.6
172	112.50	.92500	1420.0	.3390-01	.4120-01	.4680-01	.9220	.2394-02	.1736-02	.3690	2.752	536.5
172	112.50	.93200	1421.0	.3470-01	.4220-01	.4800-01	.9220	.2453-02	.1775-02	.3750	2.795	537.8
172	112.50	.93900	1422.0	.3850-01	.4700-01	.5350-01	.9220	.2738-02	.1969-02	.4100	3.048	541.1
172	112.50	.95300	1440.0	.1392	.1748	.1949	.9298	.9969-02	.7121-02	1.311	9.631	565.2
173	112.50	.96700	1441.0	.1364	.1682	.1858	.9298	.9500-02	.6973-02	1.377	10.19	550.8
173	112.50	.99400	1443.0	.7410-01	.9320-01	.1041	.9298	.5322-02	.3791-02	.6920	5.086	565.6
173	135.00	.80000-02	1331.0	.2922	.3723	.4136	.9318	.2115-01	.1494-01	2.596	19.98	574.5
172	135.00	.25000-01	1332.0	.1862	.2365	.2622	.9318	.1341-01	.9525-02	1.678	12.28	573.0
173	135.00	.50000-01	1333.0	.2037	.2575	.2848	.9318	.1457-01	.1042-01	1.866	13.68	569.1
172	135.00	.75000-01	1334.0	.1308	.1631	.1792	.9318	.9164-02	.6690-02	1.265	9.478	560.1
172	135.00	.10000+00	1335.0	.1598	.2008	.2215	.9318	.1133-01	.8174-02	1.499	11.01	565.9
172	135.00	.40000	1423.0	.4110-01	.5010-01	.5700-01	.9220	.2916-02	.2103-02	.4410	3.337	539.6
173	135.00	.92500	1424.0	.4400-01	.5370-01	.6130-01	.9220	.3137-02	.2251-02	.4650	3.460	541.5
173	140.00	.13560	1494.0	.4230-01	.5170-01	.5900-01	.9220	.3017-02	.2164-02	.4470	3.320	541.8
173	140.00	.13730	1495.0	.3750-01	.4580-01	.5230-01	.9220	.2676-02	.1918-02	.3950	2.937	542.2
173	140.00	.13890	1496.0	.3320-01	.4060-01	.4630-01	.9220	.2368-02	.1697-02	.3500	2.598	542.3

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR66)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
173	140.00	.14560	1497.0	.2830-01	.3460-01	.3950-01	.9220	.2020-02	.1446-02	.2970	2.206	542.9
173	150.00	.14230	1499.0	.2740-01	.3370-01	.3850-01	.9221	.1972-02	.1404-02	.2840	2.107	545.9
173	180.00	.80000-02	1298.0	.3640	.4846	.5273	.9378	.2697-01	.1861-01	2.798	21.29	597.9
173	180.00	.15000-01	1299.0	.3249	.4176	.4489	.9378	.2296-01	.1662-01	2.801	20.10	579.6
172	180.00	.25000-01	1300.0	.2534	.3237	.3473	.9378	.1777-01	.1296-01	2.235	15.55	576.8
173	180.00	.50000-01	1301.0	.4070	.5420	.5899	.9378	.3017-01	.2081-01	3.124	21.51	598.1
172	180.00	.75000-01	1302.0	.1455	.1847	.1978	.9378	.1012-01	.7440-02	1.312	9.003	572.9
173	180.00	.10000+00	1303.0	.3632	.4958	.5443	.9378	.2784-01	.1857-01	2.598	18.68	608.3
172	225.00	.98000	1425.0	.1668	.2421	.2621	.9415	.1341-01	.8533-02	1.028	7.323	628.7
172	225.00	.99400	1426.0	.1025	.1428	.1529	.9415	.7823-02	.5245-02	.6970	4.996	616.3
172	263.00	.13600	1336.0	.4370-01	.5380-01	.6140-01	.9230	.3141-02	.2236-02	.4470	3.314	549.1
173	263.00	.20000	1472.0	.6030-01	.7570-01	.8780-01	.9230	.4488-02	.3082-02	.5660	4.164	564.4
173	263.00	.30000	1337.0	.7510-01	.9520-01	.1112	.9230	.5686-02	.3842-02	.6820	5.081	570.7
173	263.00	.40000	1473.0	.7090-01	.8960-01	.1045	.9230	.5347-02	.3625-02	.6480	4.751	569.4
173	263.00	.50000	1474.0	.6410-01	.8020-01	.9280-01	.9230	.4746-02	.3277-02	.6100	4.487	562.1
173	263.00	.60000	1475.0	.6900-01	.8560-01	.9840-01	.9230	.5030-02	.3529-02	.6810	5.027	555.3
173	263.00	.75000	1338.0	.6890-01	.8460-01	.9660-01	.9230	.4939-02	.3521-02	.7060	5.235	547.6
173	263.00	.81500	1339.0	.6530-01	.8010-01	.9120-01	.9230	.4662-02	.3340-02	.6780	5.034	545.1
173	263.00	.83700	1340.0	.5910-01	.7260-01	.8280-01	.9230	.4235-02	.3022-02	.6080	4.506	547.1
173	263.00	.88400	1341.0	.5510-01	.6790-01	.7760-01	.9230	.3970-02	.2819-02	.5600	4.146	549.6
173	263.00	.89400	1342.0	.5370-01	.6630-01	.7580-01	.9230	.3878-02	.2749-02	.5430	4.023	550.5
173	263.00	.90700	1343.0	.5790-01	.7160-01	.8220-01	.9230	.4202-02	.2959-02	.5760	4.256	553.6
173	263.00	.92800	1477.0	.6400-01	.7940-01	.9120-01	.9230	.4666-02	.3274-02	.6320	4.663	555.3
172	263.00	.93900	1344.0	.9760-01	.1239	.1450	.9230	.7415-02	.4991-02	.8810	6.446	572.8
173	270.00	.80000-02	1304.0	.3154	.4127	.4464	.9378	.2283-01	.1613-01	2.560	19.91	589.5
173	270.00	.50000-01	1306.0	.4076	.5509	.6026	.9378	.3082-01	.2085-01	2.999	20.58	604.3
172	270.00	.75000-01	1307.0	.1588	.2031	.2180	.9378	.1115-01	.8122-02	1.394	9.697	577.5
173	270.00	.10000+00	1308.0	.3933	.5413	.5961	.9378	.3048-01	.2011-01	2.753	19.77	611.3
172	270.00	.11500	1345.0	.1570	.2041	.2438	.9228	.1247-01	.8030-02	1.303	9.475	586.9
172	277.00	.13600	1346.0	.4280-01	.5240-01	.5970-01	.9226	.3052-02	.2191-02	.4500	3.344	543.7
172	277.00	.30000	1347.0	.6990-01	.8590-01	.9820-01	.9226	.5025-02	.3574-02	.7180	5.407	548.5
173	277.00	.40000	1464.0	.6270-01	.7830-01	.9060-01	.9226	.4635-02	.3206-02	.6010	4.429	560.6
173	277.00	.60000	1466.0	.6130-01	.7550-01	.8640-01	.9226	.4419-02	.3133-02	.6230	4.616	549.3
173	277.00	.70000	1467.0	.5730-01	.7060-01	.8080-01	.9226	.4133-02	.2930-02	.5820	4.314	549.4
172	277.00	.75000	1348.0	.5720-01	.7050-01	.8080-01	.9226	.4132-02	.2927-02	.5810	4.303	550.6
172	277.00	.81500	1349.0	.5500-01	.6770-01	.7750-01	.9226	.3963-02	.2811-02	.5610	4.151	549.8
172	277.00	.83700	1350.0	.5080-01	.6270-01	.7190-01	.9226	.3675-02	.2600-02	.5150	3.809	551.2
172	277.00	.88400	1351.0	.4260-01	.5240-01	.6000-01	.9226	.3068-02	.2179-02	.4360	3.229	549.2
172	277.00	.89400	1352.0	.4700-01	.5790-01	.6640-01	.9226	.3398-02	.2403-02	.4760	3.522	551.1
173	277.00	.90000	1468.0	.4880-01	.5990-01	.6840-01	.9226	.3498-02	.2496-02	.5040	3.742	546.1
173	277.00	.90700	1353.0	.4960-01	.6080-01	.6950-01	.9226	.3552-02	.2535-02	.5130	3.803	546.0
173	277.00	.92100	1469.0	.5140-01	.6330-01	.7250-01	.9226	.3706-02	.2631-02	.5250	3.889	548.7
173	277.00	.92800	1470.0	.5550-01	.6830-01	.7820-01	.9226	.4001-02	.2836-02	.5640	4.177	549.3

DATE 23 JUN 81

IH72. AEDC V41A-R2A. INTEGRATED VEHICLE HEATING RATES

IH72, RIGHT SRB CLEAN,

(RVZR66)

RUN NUMBER	PHI	X/LS	T/C NO	HU/HREF H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
173	277.00	.93700	1471.0	.5930-01	.7320-01	.8400-01	.9226	.4296-02	.3035-02	.5980	4.429	551.0
172	277.00	.93900	1354.0	.8150-01	.1022	.1188	.9226	.6075-02	.4169-02	.7700	5.659	564.5
173	335.00	.11000	1309.0	.1714	.2143	.2389	.9295	.1222-01	.8764-02	1.636	12.04	561.5
172	337.50	.74000	1355.0	.3290-01	.3970-01	.4490-01	.9220	.2295-02	.1684-02	.3700	2.766	529.7
172	337.50	.75000	1356.0	.3050-01	.3680-01	.4150-01	.9220	.2123-02	.1562-02	.3450	2.626	528.3
173	337.50	.76500	1357.0	.3140-01	.3780-01	.4270-01	.9220	.2184-02	.1604-02	.3520	2.682	528.5
173	337.50	.92500	1359.0	.3270-01	.3950-01	.4470-01	.9220	.2286-02	.1674-02	.3650	2.728	530.3
173	337.50	.93200	1360.0	.3560-01	.4310-01	.4880-01	.9220	.2497-02	.1823-02	.3940	2.942	532.1
173	337.50	.93900	1361.0	.4630-01	.5630-01	.6400-01	.9220	.3274-02	.2366-02	.4980	3.708	537.8

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR67)

RIGHT SRB

PARAMETRIC DATA

ALPHA = -5.000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
186	-5.010	-9.000	4.020	73.00	749.0	177.0	.4680	5.293	2620.	.2218-03	.1425-06	4.079
187	-5.010	-9.000	4.020	72.90	749.0	177.0	.4680	5.292	2620.	.2218-03	.1425-06	4.079

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
186	.5123-01	.1138-01
187	.5123-01	.1138-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
187	.00000	.80000-02	1310.0	.2844	.3640	.3914	.9375	.2005-01	.1457-01	2.495	19.05	577.7
186	.00000	.25000-01	1311.0	.2781	.3578	.3855	.9375	.1975-01	.1425-01	2.395	17.17	580.9
186	.00000	.83700	1364.0	.4870-01	.5910-01	.6700-01	.9228	.3432-02	.2493-02	.5270	3.923	537.8
186	.00000	.88400	1365.0	.5290-01	.6400-01	.7220-01	.9228	.3699-02	.2709-02	.5850	4.369	533.0
186	.00000	.90700	1366.0	.5370-01	.6530-01	.7400-01	.9228	.3791-02	.2752-02	.5800	4.323	538.1
186	5.0000	.75000-01	1313.0	.1678	.2091	.2217	.9385	.1136-01	.8599-02	1.631	11.63	559.4
186	15.600	.95300	1431.0	.2062	.2598	.2719	.9414	.1393-01	.1056-01	1.919	14.08	567.4
186	20.000	.75000-01	1316.0	.2116	.2671	.2799	.9413	.1434-01	.1084-01	1.955	13.88	568.7
186	20.000	.10000+00	1318.0	.2324	.2961	.3109	.9413	.1593-01	.1191-01	2.075	15.17	574.8
186	20.000	.11000	1319.0	.2420	.3086	.3241	.9413	.1661-01	.1240-01	2.151	15.73	575.5
186	20.000	.95300	1432.0	.1919	.2416	.2518	.9422	.1290-01	.9832-02	1.789	13.13	567.0
187	22.500	.72400	1367.0	.7740-01	.9480-01	.1073	.9241	.5495-02	.3965-02	.8100	6.115	544.7
186	22.500	.74000	1368.0	.8050-01	.9860-01	.1115	.9241	.5714-02	.4126-02	.8440	6.263	544.5
186	22.500	.75000	1369.0	.7930-01	.9700-01	.1097	.9241	.5619-02	.4065-02	.8360	6.208	543.4
187	22.500	.76500	1370.0	.7390-01	.9010-01	.1016	.9241	.5204-02	.3786-02	.7900	5.975	540.4
187	22.500	.77100	1371.0	.7520-01	.9170-01	.1034	.9241	.5299-02	.3853-02	.8030	5.972	540.6
186	22.500	.92500	1372.0	.7280-01	.8860-01	.9970-01	.9241	.5109-02	.3730-02	.7860	5.852	538.3
186	22.500	.93900	1374.0	.7970-01	.9750-01	.1103	.9241	.5653-02	.4081-02	.8340	6.194	544.5
186	24.400	.95300	1433.0	.2327	.2947	.3062	.9430	.1569-01	.1192-01	2.122	15.54	571.0
186	35.000	.75000-01	1321.0	.2280	.2884	.2987	.9435	.1530-01	.1168-01	2.090	14.83	570.1

IH72. AEDC V41A-R2A. INTEGRATED VEHICLE HEATING RATES

IH72. RIGHT SRB CLEAN.

(RVZR67)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
186	35.000	.11000	1322.0	.2593	.3322	.3448	.9435	.1767-01	.1329-01	2.267	16.83	578.4
186	35.600	.95300	1434.0	.2552	.3235	.3333	.9445	.1708-01	.1307-01	2.318	16.97	571.7
186	40.000	.95300	1435.0	.2705	.3427	.3521	.9450	.1804-01	.1386-01	2.462	18.03	571.3
186	45.000	.74000	1375.0	.9230-01	.1132	.1277	.9251	.6541-02	.4727-02	.9560	7.209	546.8
186	45.000	.75000	1376.0	.9370-01	.1149	.1294	.9251	.6632-02	.4802-02	.9760	7.361	545.8
187	45.000	.76500	1377.0	.9230-01	.1131	.1273	.9251	.6519-02	.4731-02	.9670	7.179	544.5
187	45.000	.77100	1378.0	.8970-01	.1098	.1235	.9251	.6328-02	.4598-02	.9430	7.001	543.9
187	45.000	.88400	1381.0	.9350-01	.1136	.1272	.9251	.6514-02	.4792-02	1.017	7.577	536.8
187	45.000	.90700	1382.0	.9430-01	.1146	.1284	.9251	.6576-02	.4829-02	1.019	7.591	537.9
186	65.000	.11000	1323.0	.2724	.3503	.3604	.9451	.1847-01	.1395-01	2.350	16.85	580.6
186	67.500	.74000	1383.0	.9860-01	.1211	.1365	.9253	.6993-02	.5052-02	1.017	7.668	547.6
186	67.500	.75000	1384.0	.9760-01	.1200	.1353	.9253	.6932-02	.5001-02	1.004	7.566	548.2
187	67.500	.77100	1385.0	.9940-01	.1220	.1374	.9253	.7040-02	.5091-02	1.028	7.625	547.0
186	76.000	.10000+00	1324.0	.2749	.3528	.3640	.9446	.1865-01	.1400-01	2.388	17.42	579.4
186	76.000	.14100	1386.0	.5510-01	.6700-01	.7520-01	.9252	.3851-02	.2821-02	.5910	4.401	539.4
186	76.000	.14800	1387.0	.5870-01	.7150-01	.8020-01	.9252	.4107-02	.3005-02	.6280	4.671	540.1
186	76.000	.15500	1388.0	.6800-01	.8300-01	.9320-01	.9252	.4776-02	.3484-02	.7220	5.368	541.8
186	76.000	.16200	1389.0	.8310-01	.1016	.1143	.9252	.5856-02	.4256-02	.8730	6.481	543.9
186	76.000	.25000	1390.0	.7610-01	.9300-01	.1045	.9252	.5356-02	.3900-02	.8040	6.077	542.8
186	77.500	.95300	1436.0	.2715	.3453	.3541	.9454	.1814-01	.1391-01	2.437	17.83	573.8
186	77.500	.96700	1437.0	.2906	.3688	.3781	.9454	.1937-01	.1489-01	2.630	19.25	572.4
186	77.500	.99400	1439.0	.2777	.3544	.3635	.9454	.1863-01	.1423-01	2.461	17.99	576.0
187	90.000	.15000-01	1325.0	.2433	.3075	.3191	.9431	.1635-01	.1247-01	2.237	16.68	569.5
186	90.000	.25000-01	1326.0	.3096	.4007	.4176	.9431	.2140-01	.1586-01	2.614	18.71	584.2
187	90.000	.40000-01	1327.0	.2927	.3753	.3905	.9431	.2000-01	.1499-01	2.551	18.62	578.8
186	90.000	.60000-01	1328.0	.3099	.3965	.4123	.9431	.2113-01	.1588-01	2.722	18.64	577.5
186	90.000	.75000-01	1329.0	.2232	.2813	.2917	.9431	.1495-01	.1144-01	2.074	14.05	567.6
187	90.000	.13230	1479.0	.8390-01	.1024	.1152	.9246	.5903-02	.4299-02	.8930	6.642	541.2
187	90.000	.13390	1480.0	.6110-01	.7430-01	.8340-01	.9246	.4275-02	.3129-02	.6590	4.911	538.2
187	90.000	.13560	1481.0	.5300-01	.6430-01	.7210-01	.9246	.3696-02	.2715-02	.5780	4.309	536.1
187	90.000	.13730	1482.0	.4910-01	.5970-01	.6700-01	.9246	.3434-02	.2516-02	.5310	3.959	537.8
187	90.000	.13890	1483.0	.4600-01	.5590-01	.6270-01	.9246	.3215-02	.2358-02	.5000	3.724	537.0
187	90.000	.55000	1391.0	.8780-01	.1073	.1209	.9246	.6195-02	.4498-02	.9270	6.888	542.8
186	90.000	.65000	1392.0	.8280-01	.1016	.1148	.9246	.5880-02	.4241-02	.8600	6.375	546.3
186	90.000	.74000	1393.0	.1140-01	.1390-01	.1560-01	.9246	.7993-03	.5860-03	.1240	.9400	537.4
186	90.000	.76500	1394.0	.8530-01	.1048	.1186	.9246	.6075-02	.4370-02	.8800	6.520	547.7
186	90.000	.77100	1395.0	.8370-01	.1028	.1162	.9246	.5952-02	.4289-02	.8670	6.428	546.9
186	90.000	.81500	1396.0	.8440-01	.1035	.1170	.9246	.5993-02	.4326-02	.8790	6.630	545.9
186	90.000	.83700	1397.0	.8460-01	.1037	.1171	.9246	.5998-02	.4335-02	.8830	6.554	545.3
186	90.000	.88400	1398.0	.7450-01	.9080-01	.1022	.9246	.5237-02	.3816-02	.7950	5.910	540.8
186	90.000	.89400	1399.0	.7960-01	.9650-01	.1082	.9246	.5543-02	.4076-02	.8700	6.487	535.6
186	90.000	.90700	1400.0	.7540-01	.9210-01	.1038	.9246	.5317-02	.3864-02	.7980	5.933	542.4
186	90.000	.91700	1401.0	.7430-01	.9080-01	.1024	.9246	.5244-02	.3805-02	.7830	5.816	543.2

IH72, RIGHT SRB CLEAN. HU/HREF (RVZR67)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
186	90.000	.93200	1402.0	.7320-01	.8970-01	.1013	.9246	.5190-02	.3748-02	.7620	5.653	545.7
186	90.000	.93900	1403.0	.8550-01	.1052	.1192	.9246	.6106-02	.4381-02	.8760	6.485	549.1
187	95.000	.13560	1484.0	.4900-01	.5950-01	.6690-01	.9243	.3428-02	.2512-02	.5330	3.969	536.9
187	95.000	.13890	1486.0	.4490-01	.5460-01	.6130-01	.9243	.3142-02	.2300-02	.4870	3.626	537.4
187	95.000	.14560	1487.0	.3760-01	.4560-01	.5130-01	.9243	.2629-02	.1924-02	.4060	3.026	537.8
187	95.000	.14730	1488.0	.4590-01	.5580-01	.6280-01	.9243	.3217-02	.2351-02	.4950	3.687	538.4
186	104.00	.10000+00	1330.0	.2374	.3035	.3196	.9410	.1637-01	.1216-01	2.092	15.28	577.0
186	104.00	.12000	1404.0	.6400-01	.7780-01	.8770-01	.9238	.4496-02	.3279-02	.6910	5.145	538.3
186	104.00	.12700	1405.0	.1159	.1422	.1613	.9238	.8266-02	.5936-02	1.201	8.907	546.7
186	104.00	.13400	1406.0	.4710-01	.5720-01	.6440-01	.9238	.3299-02	.2411-02	.5110	3.809	537.0
186	104.00	.14100	1407.0	.4320-01	.5250-01	.5910-01	.9238	.3026-02	.2215-02	.4720	3.520	535.9
186	104.00	.14800	1408.0	.4370-01	.5310-01	.5980-01	.9238	.3065-02	.2237-02	.4730	3.522	537.7
186	104.00	.15500	1409.0	.4860-01	.5910-01	.6660-01	.9238	.3412-02	.2488-02	.5240	3.900	538.5
186	104.00	.16200	1410.0	.5720-01	.6960-01	.7860-01	.9238	.4025-02	.2929-02	.6140	4.570	539.4
186	104.00	.17300	1411.0	.7660-01	.9370-01	.1061	.9238	.5437-02	.3924-02	.8040	5.973	544.0
186	104.00	.18000	1412.0	.8240-01	.1010	.1144	.9238	.5861-02	.4224-02	.8630	6.406	544.7
186	104.00	.18600	1413.0	.8420-01	.1031	.1168	.9238	.5982-02	.4313-02	.8820	6.548	544.5
186	104.00	.19300	1414.0	.8710-01	.1066	.1209	.9238	.6192-02	.4461-02	.9100	6.757	544.9
186	104.00	.20000	1415.0	.8530-01	.1045	.1185	.9238	.6069-02	.4369-02	.8900	6.603	545.3
186	104.00	.25000	1416.0	.8140-01	.9950-01	.1127	.9238	.5774-02	.4169-02	.8550	6.461	543.8
187	112.00	.13560	1489.0	.4190-01	.5070-01	.5720-01	.9234	.2930-02	.2145-02	.4600	3.429	534.7
187	112.00	.13730	1490.0	.3970-01	.4820-01	.5430-01	.9234	.2783-02	.2036-02	.4360	3.251	535.0
187	112.00	.13890	1491.0	.3690-01	.4470-01	.5040-01	.9234	.2584-02	.1891-02	.4040	3.016	535.1
187	112.00	.14560	1492.0	.8300-02	.1000-01	.1130-01	.9234	.5783-03	.4240-03	.9100-01	.6810	533.8
187	112.00	.14730	1493.0	.2850-01	.3460-01	.3900-01	.9234	.1998-02	.1459-02	.3100	2.314	536.2
186	112.50	.74000	1417.0	.6440-01	.7910-01	.9000-01	.9233	.4610-02	.3300-02	.6670	4.947	546.9
186	112.50	.75000	1418.0	.6420-01	.7870-01	.8960-01	.9233	.4589-02	.3289-02	.6670	4.947	546.2
187	112.50	.77100	1419.0	.6350-01	.7760-01	.8810-01	.9233	.4512-02	.3253-02	.6690	5.058	543.2
186	112.50	.92500	1420.0	.6540-01	.8000-01	.9080-01	.9233	.4654-02	.3352-02	.6880	5.111	543.7
186	112.50	.93200	1421.0	.6750-01	.8260-01	.9390-01	.9233	.4811-02	.3456-02	.7050	5.231	545.1
186	112.50	.93900	1422.0	.7520-01	.9230-01	.1052	.9233	.5389-02	.3850-02	.7750	5.741	547.8
186	112.50	.95300	1440.0	.2248	.2849	.3006	.9403	.1540-01	.1152-01	2.045	14.98	571.5
187	112.50	.96700	1441.0	.3088	.3865	.4064	.9403	.2082-01	.1582-01	2.947	21.68	562.7
187	112.50	.99400	1443.0	.2437	.3106	.3281	.9403	.1681-01	.1249-01	2.172	15.88	575.0
187	135.00	.80000-02	1331.0	.2748	.3531	.3865	.9348	.1980-01	.1408-01	2.378	18.26	580.0
186	135.00	.25000-01	1332.0	.2094	.2678	.2927	.9348	.1499-01	.1073-01	1.840	13.44	577.4
187	135.00	.50000-01	1333.0	.2075	.2628	.2860	.9348	.1465-01	.1063-01	1.890	13.85	571.1
186	135.00	.75000-01	1334.0	.1515	.1893	.2049	.9348	.1050-01	.7760-02	1.453	10.87	561.8
186	135.00	.10000+00	1335.0	.1830	.2304	.2500	.9348	.1281-01	.9376-02	1.707	12.53	566.9
186	135.00	.40000	1423.0	.4480-01	.5500-01	.6280-01	.9223	.3218-02	.2298-02	.4680	3.531	545.4
187	135.00	.92500	1424.0	.3970-01	.4860-01	.5540-01	.9223	.2839-02	.2035-02	.4180	3.108	543.4
187	140.00	.13560	1494.0	.3130-01	.3790-01	.4300-01	.9221	.2201-02	.1604-02	.3450	2.574	534.0
187	140.00	.13730	1495.0	.2600-01	.3150-01	.3580-01	.9221	.1832-02	.1334-02	.2870	2.139	534.1

IH72, RIGHT SRB CLEAN,

(RVZR67)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
187	140.00	.13890	1496.0	.2490-01	.3020-01	.3420-01	.9221	.1752-02	.1274-02	.2730	2.034	535.0
187	140.00	.14560	1497.0	.2950-01	.3580-01	.4060-01	.9221	.2081-02	.1513-02	.3230	2.408	535.5
187	150.00	.14230	1499.0	.2420-01	.2940-01	.3330-01	.9220	.1706-02	.1241-02	.2660	1.986	534.6
187	180.00	.80000-02	1298.0	.2463	.3190	.3685	.9272	.1888-01	.1262-01	2.074	15.89	584.6
186	180.00	.15000-01	1299.0	.1296	.1620	.1829	.9272	.9368-02	.6641-02	1.243	9.001	561.7
187	180.00	.25000-01	1300.0	.1936	.2410	.2713	.9272	.1390-01	.9919-02	1.889	13.26	558.6
186	180.00	.50000-01	1301.0	.1225	.1523	.1713	.9272	.8777-02	.6275-02	1.200	8.427	557.8
187	180.00	.75000-01	1302.0	.8360-01	.1030	.1152	.9272	.5903-02	.4284-02	.8520	5.911	550.2
186	180.00	.10000+00	1303.0	.1118	.1398	.1577	.9272	.8081-02	.5726-02	1.071	7.881	561.9
186	225.00	.98000	1425.0	.1730	.2172	.2497	.9245	.1279-01	.8864-02	1.633	12.00	564.8
186	225.00	.99400	1426.0	.1324	.1660	.1907	.9245	.9772-02	.6781-02	1.253	9.210	564.2
187	263.00	.13600	1336.0	.2110-01	.2560-01	.2900-01	.9220	.1484-02	.1082-02	.2330	1.740	533.5
187	263.00	.30000	1337.0	.2210-01	.2680-01	.3040-01	.9220	.1558-02	.1134-02	.2440	1.850	534.1
187	263.00	.40000	1473.0	.2150-01	.2620-01	.2990-01	.9220	.1530-02	.1102-02	.2300	1.714	540.0
187	263.00	.50000	1474.0	.1350-01	.1640-01	.1860-01	.9220	.9548-03	.6913-03	.1460	1.090	537.3
187	263.00	.60000	1475.0	.2570-01	.3120-01	.3540-01	.9220	.1813-02	.1317-02	.2810	2.098	535.4
187	263.00	.75000	1338.0	.4820-01	.5810-01	.6580-01	.9220	.3371-02	.2467-02	.5380	4.018	531.1
187	263.00	.81500	1339.0	.5130-01	.6180-01	.6970-01	.9220	.3573-02	.2629-02	.5820	4.358	527.6
187	263.00	.83700	1340.0	.4950-01	.5960-01	.6730-01	.9220	.3447-02	.2534-02	.5590	4.185	528.3
187	263.00	.88400	1341.0	.4240-01	.5120-01	.5790-01	.9220	.2966-02	.2173-02	.4750	3.550	530.5
187	263.00	.89400	1342.0	.4200-01	.5070-01	.5740-01	.9220	.2940-02	.2149-02	.4670	3.486	531.9
187	263.00	.90700	1343.0	.4460-01	.5410-01	.6140-01	.9220	.3147-02	.2287-02	.4890	3.647	535.2
187	263.00	.92800	1477.0	.4560-01	.5540-01	.6300-01	.9220	.3228-02	.2334-02	.4920	3.668	538.0
186	263.00	.93900	1344.0	.6340-01	.7740-01	.8830-01	.9220	.4526-02	.3246-02	.6710	4.985	542.4
187	270.00	.80000-02	1304.0	.1568	.1975	.2276	.9246	.1166-01	.8031-02	1.458	11.47	567.4
187	270.00	.50000-01	1306.0	.1004	.1249	.1425	.9246	.7303-02	.5143-02	.9820	6.896	558.0
186	270.00	.75000-01	1307.0	.6150-01	.7580-01	.8590-01	.9246	.4401-02	.3151-02	.6260	4.417	550.2
187	270.00	.10000+00	1308.0	.8650-01	.1079	.1234	.9246	.6322-02	.4431-02	.8360	6.161	560.2
186	270.00	.11500	1345.0	.7590-01	.9370-01	.1078	.9220	.5523-02	.3890-02	.7690	5.688	551.4
186	277.00	.13600	1346.0	.1870-01	.2270-01	.2570-01	.9220	.1317-02	.9594-03	.2060	1.540	534.0
186	277.00	.30000	1347.0	.2230-01	.2710-01	.3080-01	.9220	.1580-02	.1144-02	.2430	1.840	536.9
187	277.00	.40000	1464.0	.2150-01	.2620-01	.2980-01	.9220	.1527-02	.1100-02	.2300	1.708	540.2
187	277.00	.60000	1466.0	.3480-01	.4230-01	.4810-01	.9220	.2464-02	.1783-02	.3770	2.806	537.7
187	277.00	.70000	1467.0	.3750-01	.4570-01	.5210-01	.9220	.2667-02	.1923-02	.4030	2.996	539.6
186	277.00	.75000	1348.0	.3950-01	.4790-01	.5430-01	.9220	.2784-02	.2023-02	.4320	3.224	535.4
186	277.00	.81500	1349.0	.3690-01	.4460-01	.5050-01	.9220	.2588-02	.1891-02	.4100	3.063	532.2
186	277.00	.83700	1350.0	.3630-01	.4390-01	.4970-01	.9220	.2547-02	.1859-02	.4020	3.005	532.6
186	277.00	.88400	1351.0	.2820-01	.3410-01	.3860-01	.9220	.1978-02	.1447-02	.3150	2.352	531.5
186	277.00	.89400	1352.0	.3220-01	.3900-01	.4420-01	.9220	.2266-02	.1651-02	.3560	2.654	533.6
187	277.00	.90000	1468.0	.3180-01	.3840-01	.4360-01	.9220	.2232-02	.1628-02	.3520	2.627	532.9
187	277.00	.90700	1353.0	.3280-01	.3970-01	.4510-01	.9220	.2308-02	.1682-02	.3620	2.706	533.5
187	277.00	.92100	1469.0	.3460-01	.4190-01	.4760-01	.9220	.2439-02	.1771-02	.3770	2.814	535.8
187	277.00	.92800	1470.0	.3660-01	.4450-01	.5060-01	.9220	.2591-02	.1875-02	.3970	2.955	537.5

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR67)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
187	277.00	.93700	1471.0	.3450-01	.4200-01	.4790-01	.9220	.2451-02	.1768-02	.3710	2.759	539.3
186	277.00	.93900	1354.0	.5540-01	.6770-01	.7730-01	.9220	.3960-02	.2838-02	.5850	4.345	542.9
187	335.00	.11000	1309.0	.1711	.2157	.2375	.9324	.1217-01	.8767-02	1.588	11.65	567.9
186	337.50	.74000	1355.0	.3160-01	.3840-01	.4370-01	.9220	.2241-02	.1617-02	.3390	2.526	539.2
186	337.50	.75000	1356.0	.3040-01	.3700-01	.4200-01	.9220	.2153-02	.1558-02	.3290	2.493	537.8
187	337.50	.76500	1357.0	.2800-01	.3400-01	.3850-01	.9220	.1974-02	.1436-02	.3080	2.334	534.8
187	337.50	.92500	1359.0	.2630-01	.3190-01	.3620-01	.9220	.1853-02	.1347-02	.2880	2.146	535.3
187	337.50	.93200	1360.0	.2690-01	.3270-01	.3720-01	.9220	.1904-02	.1379-02	.2960	2.177	537.1
187	337.50	.93900	1361.0	.4220-01	.5150-01	.5870-01	.9220	.3007-02	.2161-02	.4480	3.333	541.5

PARAMETRIC DATA

ALPHA = .0000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
182	.0000	-9.000	4.020	73.00	749.0	176.9	.4680	5.295	2620.	.2220-03	.1424-06	4.083
183	.0000	-9.000	4.020	72.90	749.0	176.9	.4680	5.291	2620.	.2218-03	.1425-06	4.079

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
182	.5124-01	.1138-01
183	.5122-01	.1138-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
183	.00000	.80000-02	1310.0	.2325	.3088	.3508	.9318	.1797-01	.1191-01	1.806	13.65	597.2
182	.00000	.25000-01	1311.0	.1733	.2300	.2612	.9318	.1338-01	.8881-02	1.349	9.596	596.9
182	.00000	.83700	1364.0	.1890-01	.2340-01	.2700-01	.9220	.1386-02	.9678-03	.1870	1.384	555.0
182	.00000	.88400	1365.0	.2400-01	.2990-01	.3460-01	.9220	.1772-02	.1232-02	.2360	1.743	557.0
182	.00000	.90700	1366.0	.2380-01	.2970-01	.3450-01	.9220	.1769-02	.1218-02	.2280	1.680	561.3
182	5.0000	.75000-01	1313.0	.1048	.1334	.1474	.9326	.7552-02	.5372-02	.9390	6.649	573.9
182	15.600	.95300	1431.0	.9780-01	.1313	.1461	.9352	.7488-02	.5012-02	.7350	5.305	602.0
182	20.000	.75000-01	1316.0	.1204	.1568	.1722	.9352	.8823-02	.6172-02	.9960	7.007	587.3
182	20.000	.10000+00	1318.0	.1438	.1896	.2094	.9352	.1073-01	.7367-02	1.141	8.264	593.9
182	20.000	.11000	1319.0	.1606	.2118	.2338	.9352	.1198-01	.8230-02	1.275	9.238	593.8
183	20.000	.95300	1432.0	.7360-01	.9890-01	.1094	.9360	.5608-02	.3771-02	.5520	3.980	602.4
182	22.500	.72400	1367.0	.4370-01	.5440-01	.6290-01	.9224	.3224-02	.2238-02	.4250	3.189	558.7
182	22.500	.74000	1368.0	.4820-01	.6060-01	.7070-01	.9224	.3621-02	.2472-02	.4530	3.324	565.7
182	22.500	.75000	1369.0	.4260-01	.5360-01	.6240-01	.9224	.3195-02	.2185-02	.4020	2.953	564.9
183	22.500	.76500	1370.0	.4160-01	.5180-01	.5990-01	.9224	.3066-02	.2129-02	.4050	3.038	558.5
183	22.500	.77100	1371.0	.4120-01	.5130-01	.5940-01	.9224	.3041-02	.2109-02	.4000	2.950	559.1
182	22.500	.92500	1372.0	.4070-01	.5140-01	.6020-01	.9224	.3083-02	.2086-02	.3750	2.751	569.0
182	22.500	.93900	1374.0	.4990-01	.6370-01	.7520-01	.9224	.3853-02	.2556-02	.4410	3.224	576.1
182	24.400	.95300	1433.0	.9360-01	.1287	.1429	.9368	.7322-02	.4794-02	.6570	4.718	611.7
182	35.000	.75000-01	1321.0	.1338	.1764	.1912	.9378	.9798-02	.6858-02	1.064	7.458	593.6

IH72, RIGHT SRB CLEAN,

HU/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
182	35.000	.11000	1322.0	.1774	.2385	.2603	.9378	.1334-01	.9089-02	1.328	9.738	602.7
182	35.600	.95300	1434.0	.8970-01	.1272	.1404	.9388	.7194-02	.4599-02	.5840	4.174	621.7
182	40.000	.95300	1435.0	.8120-01	.1176	.1297	.9395	.6648-02	.4163-02	.5040	3.592	627.6
182	45.000	.74000	1375.0	.6300-01	.8060-01	.9480-01	.9233	.4860-02	.3226-02	.5510	4.090	578.0
182	45.000	.75000	1376.0	.6160-01	.7910-01	.9320-01	.9233	.4777-02	.3159-02	.5350	3.971	579.3
183	45.000	.76500	1377.0	.5580-01	.7160-01	.8430-01	.9233	.4319-02	.2857-02	.4850	3.537	579.1
183	45.000	.77100	1378.0	.5610-01	.7190-01	.8460-01	.9233	.4334-02	.2873-02	.4890	3.573	578.5
183	45.000	.88400	1381.0	.5590-01	.7180-01	.8470-01	.9233	.4337-02	.2863-02	.4840	3.528	579.9
183	45.000	.90700	1382.0	.5830-01	.7490-01	.8830-01	.9233	.4522-02	.2986-02	.5050	3.682	579.8
182	65.000	.11000	1323.0	.2030	.2797	.2977	.9420	.1525-01	.1040-01	1.420	10.03	612.2
182	67.500	.74000	1383.0	.7280-01	.9540-01	.1136	.9242	.5822-02	.3732-02	.5900	4.350	590.7
182	67.500	.75000	1384.0	.6720-01	.8880-01	.1064	.9242	.5452-02	.3443-02	.5300	3.902	594.8
183	67.500	.77100	1385.0	.6270-01	.8320-01	.1000+00	.9242	.5124-02	.3212-02	.4890	3.534	596.7
182	76.000	.10000+00	1324.0	.1925	.2666	.2821	.9429	.1445-01	.9864-02	1.329	9.530	614.0
182	76.000	.14100	1386.0	.4370-01	.5520-01	.6390-01	.9245	.3273-02	.2238-02	.4010	2.936	569.8
182	76.000	.14800	1387.0	.4670-01	.5910-01	.6830-01	.9245	.3501-02	.2394-02	.4280	3.138	569.9
182	76.000	.15500	1388.0	.5110-01	.6480-01	.7510-01	.9245	.3847-02	.2619-02	.4640	3.397	571.6
182	76.000	.16200	1389.0	.5860-01	.7460-01	.8670-01	.9245	.4444-02	.3003-02	.5240	3.831	574.3
182	76.000	.25000	1390.0	.6370-01	.8030-01	.9260-01	.9245	.4745-02	.3262-02	.5900	4.404	567.8
182	77.500	.95300	1436.0	.2980-01	.4730-01	.5090-01	.9439	.2610-02	.1526-02	.1540	1.089	647.6
182	77.500	.96700	1437.0	.7770-01	.1287	.1399	.9439	.7169-02	.3984-02	.3760	2.648	654.2
182	77.500	.99400	1439.0	.7590-01	.1183	.1269	.9439	.6502-02	.3887-02	.4060	2.868	644.3
183	90.000	.15000-01	1325.0	.2086	.2874	.3029	.9432	.1551-01	.1068-01	1.459	10.65	612.2
182	90.000	.25000-01	1326.0	.2371	.3522	.3768	.9433	.1931-01	.1215-01	1.392	9.726	634.2
183	90.000	.40000-01	1327.0	.2620	.3736	.3964	.9432	.2031-01	.1342-01	1.683	12.02	623.4
182	90.000	.60000-01	1328.0	.2677	.3828	.4063	.9433	.2082-01	.1372-01	1.707	11.42	624.3
182	90.000	.75000-01	1329.0	.1554	.2101	.2206	.9433	.1130-01	.7961-02	1.143	7.603	605.1
183	90.000	.13230	1479.0	.9800-01	.1252	.1457	.9246	.7461-02	.5021-02	.8670	6.335	576.1
183	90.000	.13390	1480.0	.7510-01	.9490-01	.1095	.9246	.5610-02	.3848-02	.6920	5.073	569.1
183	90.000	.13560	1481.0	.5600-01	.7030-01	.8090-01	.9246	.4143-02	.2866-02	.5250	3.859	565.6
183	90.000	.13730	1482.0	.4780-01	.6000-01	.6900-01	.9246	.3535-02	.2446-02	.4480	3.292	565.6
183	90.000	.13890	1483.0	.4380-01	.5500-01	.6320-01	.9246	.3240-02	.2245-02	.4130	3.032	565.0
183	90.000	.55000	1391.0	.8640-01	.1099	.1275	.9246	.6529-02	.4427-02	.7760	5.680	573.5
183	90.000	.65000	1392.0	.7960-01	.1021	.1192	.9246	.6104-02	.4079-02	.6940	5.066	578.6
182	90.000	.76500	1394.0	.6280-01	.8470-01	.1029	.9246	.5274-02	.3216-02	.4650	3.353	604.1
182	90.000	.77100	1395.0	.6700-01	.9040-01	.1099	.9246	.5633-02	.3434-02	.4970	3.579	604.1
182	90.000	.81500	1396.0	.6670-01	.9100-01	.1117	.9246	.5724-02	.3416-02	.4780	3.497	608.8
182	90.000	.83700	1397.0	.6520-01	.8930-01	.1099	.9246	.5630-02	.3343-02	.4640	3.338	609.8
182	90.000	.88400	1398.0	.4020-01	.5400-01	.6540-01	.9246	.3349-02	.2060-02	.3020	2.178	602.2
182	90.000	.89400	1399.0	.8750-01	.1163	.1397	.9246	.7158-02	.4485-02	.6780	4.901	597.6
182	90.000	.90700	1400.0	.4270-01	.5750-01	.6980-01	.9246	.3577-02	.2189-02	.3180	2.295	603.3
182	90.000	.91700	1401.0	.4310-01	.5800-01	.7040-01	.9246	.3606-02	.2208-02	.3210	2.317	603.2
182	90.000	.93200	1402.0	.5510-01	.7450-01	.9080-01	.9246	.4652-02	.2823-02	.4050	2.920	605.2

IH72, RIGHT SRB CLEAN.

HU/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
182	90.000	.93900	1403.0	.7910-01	.1092	.1353	.9246	.6933-02	.4052-02	.5510	3.951	612.9
183	95.000	.13560	1484.0	.5590-01	.7030-01	.8080-01	.9246	.4138-02	.2864-02	.5250	3.860	565.4
183	95.000	.13890	1486.0	.4500-01	.5650-01	.6490-01	.9246	.3323-02	.2307-02	.4260	3.130	564.2
183	95.000	.14560	1487.0	.4500-01	.5660-01	.6510-01	.9246	.3334-02	.2307-02	.4230	3.106	565.5
183	95.000	.14730	1488.0	.4710-01	.5930-01	.6830-01	.9246	.3496-02	.2411-02	.4390	3.222	566.8
182	104.00	.10000+00	1330.0	.1844	.2555	.2704	.9429	.1385-01	.9449-02	1.271	9.117	614.2
182	104.00	.12000	1404.0	.7990-01	.1014	.1175	.9245	.6023-02	.4093-02	.7230	5.290	572.2
182	104.00	.12700	1405.0	.1193	.1559	.1849	.9245	.9473-02	.6112-02	.9740	7.072	589.4
182	104.00	.13400	1406.0	.5350-01	.6750-01	.7780-01	.9245	.3988-02	.2741-02	.4960	3.640	567.8
182	104.00	.14100	1407.0	.4590-01	.5780-01	.6650-01	.9245	.3408-02	.2353-02	.4290	3.154	566.2
182	104.00	.14800	1408.0	.4880-01	.6150-01	.7090-01	.9245	.3636-02	.2502-02	.4540	3.332	567.3
182	104.00	.15500	1409.0	.5290-01	.6690-01	.7730-01	.9245	.3961-02	.2709-02	.4850	3.555	569.8
182	104.00	.16200	1410.0	.6110-01	.7750-01	.8990-01	.9245	.4608-02	.3130-02	.5520	4.039	572.5
182	104.00	.17300	1411.0	.7390-01	.9470-01	.1106	.9245	.5670-02	.3785-02	.6440	4.697	5[illegible].7
182	104.00	.18000	1412.0	.8300-01	.1068	.1251	.9245	.6411-02	.4255-02	.7160	5.217	580.6
182	104.00	.18600	1413.0	.8490-01	.1092	.1279	.9245	.6553-02	.4349-02	.7310	5.331	580.6
182	104.00	.19300	1414.0	.8620-01	.1110	.1300	.9245	.6660-02	.4419-02	.7430	5.417	580.6
182	104.00	.20000	1415.0	.8790-01	.1131	.1326	.9245	.6792-02	.4504-02	.7560	5.510	580.9
182	104.00	.25000	1416.0	.8380-01	.1077	.1260	.9245	.6456-02	.4293-02	.7250	5.377	579.9
183	112.00	.13560	1489.0	.5450-01	.6800-01	.7790-01	.9242	.3992-02	.2793-02	.5280	3.889	559.8
183	112.00	.13730	1490.0	.4850-01	.6050-01	.6930-01	.9242	.3552-02	.2486-02	.4700	3.460	559.8
183	112.00	.13890	1491.0	.4330-01	.5400-01	.6190-01	.9242	.3169-02	.2216-02	.4180	3.082	560.1
183	112.00	.14560	1492.0	.7700-02	.9400-02	.1060-01	.9242	.5420-03	.3966-03	.8400-01	.6250	537.4
183	112.00	.14730	1493.0	.3530-01	.4390-01	.5020-01	.9242	.2571-02	.1808-02	.3450	2.547	557.7
182	112.50	.74000	1417.0	.7330-01	.9540-01	.1152	.9242	.5903-02	.3754-02	.5850	4.238	592.9
182	112.50	.75000	1418.0	.7080-01	.9380-01	.1126	.9242	.5769-02	.3627-02	.5540	4.009	596.0
183	112.50	.77100	1419.0	.6350-01	.8430-01	.1014	.9242	.5196-02	.3251-02	.4930	3.623	597.3
182	112.50	.92500	1420.0	.5270-01	.7120-01	.8680-01	.9242	.4450-02	.2701-02	.3900	2.809	604.4
182	112.50	.93200	1421.0	.6050-01	.8180-01	.9990-01	.9242	.5120-02	.3098-02	.4450	3.206	605.1
182	112.50	.93900	1422.0	.8780-01	.1204	.1489	.9242	.7628-02	.4500-02	.6230	4.473	610.4
182	112.50	.95300	1440.0	.2560-01	.4130-01	.4500-01	.9432	.2307-02	.1313-02	.1300	.9140	650.0
183	112.50	.96700	1441.0	.1331	.2637	.3047	.9431	.1561-01	.6817-02	.5150	3.593	673.2
183	112.50	.99400	1443.0	.8110-01	.1267	.1373	.9431	.7032-02	.4156-02	.4330	3.057	644.7
183	135.00	.80000-02	1331.0	.2498	.3486	.3804	.9394	.1949-01	.1279-01	1.691	12.75	616.7
182	135.00	.25000-01	1332.0	.2197	.3095	.3387	.9394	.1736-01	.1126-01	1.453	10.39	619.7
183	135.00	.50000-01	1333.0	.2445	.3374	.3670	.9394	.1880-01	.1252-01	1.702	12.22	612.9
182	135.00	.75000-01	1334.0	.1429	.1904	.2048	.9394	.1049-01	.7321-02	1.098	8.067	598.8
182	135.00	.10000+00	1335.0	.1763	.2379	.2568	.9394	.1316-01	.9036-02	1.308	9.426	604.0
182	135.00	.40000	1423.0	.6240-01	.7930-01	.9260-01	.9233	.4743-02	.3200-02	.5640	4.203	572.3
183	135.00	.92500	1424.0	.6440-01	.8420-01	.1008	.9233	.5165-02	.3298-02	.5240	3.801	590.0
183	140.00	.13560	1494.0	.4820-01	.5970-01	.6850-01	.9231	.3509-02	.2471-02	.4810	3.552	554.2
183	140.00	.13730	1495.0	.3930-01	.4860-01	.5580-01	.9231	.2857-02	.2014-02	.3930	2.902	553.8
183	140.00	.13890	1496.0	.3940-01	.4890-01	.5610-01	.9231	.2873-02	.2020-02	.3910	2.891	555.0

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR68)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
183	140.00	.14560	1497.0	.4850-01	.6020-01	.6910-01	.9231	.3541-02	.2484-02	.4790	3.538	555.9
183	150.00	.14230	1499.0	.3730-01	.4610-01	.5300-01	.9227	.2713-02	.1912-02	.3750	2.776	552.5
183	180.00	.80000-02	1298.0	.2583	.3556	.4123	.9317	.2112-01	.1323-01	1.811	13.68	612.0
183	180.00	.15000-01	1299.0	.1892	.2449	.2744	.9317	.1406-01	.9690-02	1.594	11.41	584.3
182	180.00	.25000-01	1300.0	.2590	.3431	.3893	.9317	.1995-01	.1327-01	2.026	13.96	596.1
183	180.00	.50000-01	1301.0	.1750	.2246	.2505	.9317	.1283-01	.8962-02	1.519	10.55	579.3
182	180.00	.75000-01	1302.0	.1197	.1525	.1694	.9317	.8682-02	.6132-02	1.067	7.316	574.7
183	180.00	.10000+00	1303.0	.1483	.1918	.2149	.9317	.1101-01	.7595-02	1.252	9.113	584.0
182	225.00	.98000	1425.0	.6440-01	.8470-01	.9920-01	.9267	.5085-02	.3301-02	.5160	3.741	592.4
182	225.00	.99400	1426.0	.7210-01	.9460-01	.1106	.9267	.5670-02	.3692-02	.5810	4.212	591.5
182	263.00	.13600	1336.0	.2400-01	.2930-01	.3350-01	.9220	.1719-02	.1228-02	.2510	1.864	544.3
183	263.00	.20000	1472.0	.1470-01	.1780-01	.2020-01	.9220	.1033-02	.7537-03	.1630	1.215	533.0
183	263.00	.30000	1337.0	.3100-01	.3760-01	.4280-01	.9220	.2190-02	.1589-02	.3380	2.564	536.0
183	263.00	.40000	1473.0	.3400-01	.4170-01	.4770-01	.9220	.2446-02	.1744-02	.3550	2.633	545.3
183	263.00	.50000	1474.0	.3880-01	.4760-01	.5440-01	.9220	.2787-02	.1989-02	.4060	3.015	544.7
183	263.00	.60000	1475.0	.4380-01	.5370-01	.6150-01	.9220	.3151-02	.2245-02	.4560	3.382	545.7
183	263.00	.75000	1338.0	.5640-01	.6950-01	.8000-01	.9220	.4095-02	.2887-02	.5720	4.230	550.8
183	263.00	.81500	1339.0	.5740-01	.7100-01	.8180-01	.9220	.4192-02	.2939-02	.5740	4.246	553.4
183	263.00	.83700	1340.0	.5260-01	.6530-01	.7560-01	.9220	.3872-02	.2693-02	.5170	3.812	557.0
183	263.00	.88400	1341.0	.4620-01	.5750-01	.6670-01	.9220	.3415-02	.2366-02	.4500	3.314	558.7
183	263.00	.89400	1342.0	.4630-01	.5780-01	.6710-01	.9220	.3437-02	.2373-02	.4480	3.299	560.1
183	263.00	.90700	1343.0	.4680-01	.5860-01	.6820-01	.9220	.3494-02	.2395-02	.4450	3.270	563.1
183	263.00	.92800	1477.0	.5330-01	.6710-01	.7840-01	.9220	.4017-02	.2728-02	.4970	3.645	566.8
182	263.00	.93900	1344.0	.7400-01	.9570-01	.1144	.9220	.5860-02	.3795-02	.6290	4.579	583.1
183	270.00	.80000-02	1304.0	.1857	.2351	.2718	.9246	.1392-01	.9510-02	1.694	13.30	570.7
183	270.00	.50000-01	1306.0	.7980-01	.9890-01	.1126	.9246	.5768-02	.4086-02	.7910	5.563	555.2
182	270.00	.75000-01	1307.0	.5770-01	.7170-01	.8170-01	.9246	.4188-02	.2955-02	.5660	3.980	557.1
183	270.00	.10000+00	1308.0	.7960-01	.9980-01	.1147	.9246	.5873-02	.4075-02	.7510	5.522	564.5
182	270.00	.11500	1345.0	.6270-01	.7900-01	.9240-01	.9220	.4735-02	.3214-02	.5840	4.289	566.9
182	277.00	.13600	1346.0	.2320-01	.2840-01	.3260-01	.9220	.1669-02	.1188-02	.2410	1.787	546.0
182	277.00	.30000	1347.0	.2970-01	.3660-01	.4200-01	.9220	.2150-02	.1523-02	.3050	2.299	548.5
183	277.00	.40000	1464.0	.3560-01	.4370-01	.5010-01	.9220	.2565-02	.1824-02	.3690	2.736	546.6
183	277.00	.60000	1466.0	.4030-01	.4950-01	.5670-01	.9220	.2906-02	.2066-02	.4180	3.098	546.6
183	277.00	.70000	1467.0	.4600-01	.5700-01	.6580-01	.9220	.3371-02	.2354-02	.4560	3.367	555.1
182	277.00	.75000	1348.0	.5330-01	.6680-01	.7780-01	.9220	.3988-02	.2731-02	.5060	3.721	563.5
182	277.00	.81500	1349.0	.5340-01	.6720-01	.7850-01	.9220	.4023-02	.2735-02	.4990	3.666	566.3
182	277.00	.83700	1350.0	.4960-01	.6250-01	.7320-01	.9220	.3749-02	.2544-02	.4620	3.394	567.0
182	277.00	.88400	1351.0	.4460-01	.5610-01	.6570-01	.9220	.3364-02	.2284-02	.4150	3.049	566.9
182	277.00	.89400	1352.0	.4490-01	.5670-01	.6660-01	.9220	.3411-02	.2301-02	.4130	3.028	569.3
183	277.00	.90000	1468.0	.4610-01	.5780-01	.6720-01	.9220	.3444-02	.2364-02	.4400	3.238	562.6
183	277.00	.90700	1353.0	.4690-01	.5870-01	.6840-01	.9220	.3502-02	.2403-02	.4470	3.288	562.8
183	277.00	.92100	1469.0	.4810-01	.6040-01	.7060-01	.9220	.3615-02	.2463-02	.4520	3.317	565.5
183	277.00	.92800	1470.0	.5350-01	.6740-01	.7890-01	.9220	.4040-02	.2740-02	.4970	3.650	567.3

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, RIGHT SRB CLEAN, HU/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
183	277.00	.93700	1471.0	.6000-01	.7590-01	.8910-01	.9220	.4565-02	.3072-02	.5490	4.020	570.3
182	277.00	.93900	1354.0	.7770-01	.1009	.1212	.9220	.6209-02	.3979-02	.6470	4.706	586.1
183	335.00	.11000	1309.0	.1238	.1574	.1785	.9282	.9142-02	.6340-02	1.112	8.139	573.4
182	337.50	.74000	1355.0	.3330-01	.4110-01	.4730-01	.9220	.2426-02	.1705-02	.3350	2.478	552.2
182	337.50	.75000	1356.0	.3240-01	.4000-01	.4610-01	.9220	.2362-02	.1662-02	.3280	2.465	551.6
183	337.50	.76500	1357.0	.3190-01	.3900-01	.4450-01	.9220	.2278-02	.1634-02	.3370	2.550	542.3
183	337.50	.92500	1359.0	.3440-01	.4260-01	.4910-01	.9220	.2517-02	.1760-02	.3420	2.525	554.6
183	337.50	.93200	1360.0	.3710-01	.4620-01	.5350-01	.8220	.2738-02	.1902-02	.3640	2.685	557.5
183	337.50	.93900	1361.0	.4730-01	.5940-01	.6930-01	.9220	.3550-02	.2425-02	.4470	3.286	564.5

PARAMETRIC DATA

ALPHA = 5.000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
184	5.020	-9.000	4.020	72.90	749.0	176.9	.4670	5.288	2620.	.2217-03	.1425-06	4.077
185	5.010	-9.000	4.020	73.00	749.0	176.9	.4680	5.293	2620.	.2219-03	.1424-06	4.081

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
184	.5121-01	.1139-01
185	.5123-01	.1138-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
185	.00000	.80000-02	1310.0	.2189	.2843	.3291	.9272	.1686-01	.1122-01	1.826	13.88	585.9
184	.00000	.25000-01	1311.0	.1329	.1685	.1920	.9272	.9833-02	.6804-02	1.204	8.673	571.9
184	.00000	.83700	1364.0	.2740-01	.3350-01	.3820-01	.9220	.1954-02	.1405-02	.2920	2.172	541.0
184	.00000	.88400	1365.0	.3350-01	.4070-01	.4640-01	.9220	.2375-02	.1713-02	.3590	2.675	539.1
184	.00000	.90700	1366.0	.3170-01	.3890-01	.4450-01	.9220	.2277-02	.1626-02	.3320	2.465	544.6
184	5.0000	.75000-01	1313.0	.8830-01	.1100	.1235	.9278	.6326-02	.4522-02	.8570	6.110	559.4
184	15.600	.95300	1431.0	.9010-01	.1137	.1269	.9300	.6501-02	.4616-02	.8340	6.122	568.1
184	20.000	.75000-01	1316.0	.1062	.1342	.1500	.9301	.7679-02	.5439-02	.9760	6.924	569.4
184	20.000	.10000+00	1318.0	.1225	.1562	.1754	.9301	.8982-02	.6274-02	1.089	7.963	575.2
184	20.000	.11000	1319.0	.1308	.1666	.1869	.9301	.9569-02	.6701-02	1.170	8.560	574.2
184	20.000	.95300	1432.0	.6880-01	.8690-01	.9660-01	.9307	.4948-02	.3524-02	.6350	4.660	568.6
185	22.500	.72400	1367.0	.2230-01	.2730-01	.3130-01	.9220	.1602-02	.1142-02	.2320	1.750	545.5
184	22.500	.74000	1368.0	.2350-01	.2870-01	.3270-01	.9220	.1675-02	.1201-02	.2480	1.844	542.4
184	22.500	.75000	1369.0	.2370-01	.2890-01	.3300-01	.9220	.1689-02	.1214-02	.2520	1.874	541.3
185	22.500	.76500	1370.0	.2320-01	.2840-01	.3240-01	.9220	.1659-02	.1188-02	.2440	1.847	543.1
185	22.500	.77100	1371.0	.2360-01	.2880-01	.3290-01	.9220	.1685-02	.1207-02	.2490	1.847	542.8
184	22.500	.92500	1372.0	.3020-01	.3680-01	.4210-01	.9220	.2154-02	.1545-02	.3190	2.371	542.4
184	22.500	.93900	1374.0	.5150-01	.6330-01	.7260-01	.9220	.3720-02	.2635-02	.5280	3.912	548.5
184	24.400	.95300	1433.0	.9310-01	.1184	.1316	.9315	.6740-02	.4768-02	.8360	6.115	573.6
184	35.000	.75000-01	1321.0	.1191	.1525	.1687	.9328	.8637-02	.6101-02	1.045	7.388	577.5

IH72. RIGHT SRB CLEAN.

(RVZR69)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
184	35.000	.11000	1322.0	.1520	.1973	.2198	.9328	.1125-01	.7782-02	1.269	9.384	585.8
184	35.600	.95300	1434.0	.9870-01	.1272	.1404	.9337	.7190-02	.5054-02	.8450	6.157	581.7
184	40.000	.95300	1435.0	.1010	.1315	.1450	.9346	.7425-02	.5172-02	.8350	6.069	587.4
184	45.000	.74000	1375.0	.3840-01	.4750-01	.5460-01	.9223	.2795-02	.1968-02	.3870	2.912	552.1
184	45.000	.75000	1376.0	.4000-01	.4930-01	.5670-01	.9223	.2902-02	.2047-02	.4050	3.044	551.2
185	45.000	.76500	1377.0	.3570-01	.4420-01	.5100-01	.9223	.2611-02	.1832-02	.3570	2.637	553.9
185	45.000	.77100	1378.0	.3500-01	.4320-01	.4970-01	.9223	.2546-02	.1791-02	.3510	2.596	552.7
185	45.000	.88400	1381.0	.3720-01	.4580-01	.5260-01	.9223	.2692-02	.1906-02	.3800	2.811	549.6
185	45.000	.90700	1382.0	.2440-01	.3020-01	.3470-01	.9223	.1776-02	.1251-02	.2460	1.821	551.9
184	65.000	.11000	1323.0	.1879	.2531	.2743	.9389	.1405-01	.9623-02	1.398	9.915	603.5
184	67.500	.74000	1383.0	.6240-01	.7840-01	.9090-01	.9233	.4654-02	.3196-02	.5860	4.376	565.6
184	67.500	.75000	1384.0	.5870-01	.7390-01	.8570-01	.9233	.4389-02	.3006-02	.5480	4.089	566.7
185	67.500	.77100	1385.0	.5840-01	.7360-01	.8550-01	.9234	.4379-02	.2993-02	.5430	3.984	567.4
184	76.000	.10000+00	1324.0	.1764	.2405	.2575	.9410	.1319-01	.9035-02	1.269	9.127	608.4
184	76.000	.14100	1386.0	.3740-01	.4710-01	.5440-01	.9238	.2784-02	.1918-02	.3510	2.582	565.6
184	76.000	.14800	1387.0	.3680-01	.4610-01	.5320-01	.9238	.2726-02	.1883-02	.3470	2.553	564.4
184	76.000	.15500	1388.0	.4040-01	.5070-01	.5860-01	.9238	.3001-02	.2067-02	.3790	2.785	565.5
184	76.000	.16200	1389.0	.4510-01	.5680-01	.6570-01	.9238	.3367-02	.2312-02	.4210	3.090	566.8
184	76.000	.25000	1390.0	.5820-01	.7310-01	.8430-01	.9238	.4318-02	.2982-02	.5500	4.108	564.5
184	77.500	.95300	1436.0	.8810-01	.1252	.1341	.9421	.6867-02	.4509-02	.5690	4.064	622.7
184	77.500	.96700	1437.0	.1169	.1727	.1867	.9421	.9560-02	.5985-02	.6930	4.928	633.0
184	77.500	.99400	1439.0	.1234	.1800	.1940	.9421	.9934-02	.6320-02	.7530	5.358	629.7
185	90.000	.15000-01	1325.0	.2095	.2848	.2995	.9432	.1534-01	.1073-01	1.519	11.12	607.2
184	90.000	.25000-01	1326.0	.2523	.3623	.3854	.9431	.1974-01	.1292-01	1.593	11.17	625.6
185	90.000	.40000-01	1327.0	.2489	.3539	.3756	.9432	.1924-01	.1275-01	1.608	11.48	622.7
184	90.000	.60000-01	1328.0	.2707	.3790	.4011	.9431	.2054-01	.1386-01	1.816	12.19	617.9
184	90.000	.75000-01	1329.0	.1594	.2138	.2243	.9431	.1149-01	.8162-02	1.201	7.997	601.8
185	90.000	.13230	1479.0	.9760-01	.1244	.1445	.9246	.7401-02	.5002-02	.8710	6.369	574.6
185	90.000	.13390	1480.0	.7440-01	.9380-01	.1081	.9246	.5539-02	.3813-02	.6900	5.067	567.7
185	90.000	.13560	1481.0	.5380-01	.6750-01	.7750-01	.9246	.3972-02	.2756-02	.5080	3.736	564.3
185	90.000	.13730	1482.0	.4200-01	.5270-01	.6050-01	.9246	.3100-02	.2152-02	.3970	2.918	564.2
185	90.000	.13890	1483.0	.4330-01	.5430-01	.6230-01	.9246	.3190-02	.2217-02	.4100	3.015	563.8
185	90.000	.55000	1391.0	.8210-01	.1047	.1217	.9246	.6237-02	.4208-02	.7300	5.335	575.3
184	90.000	.65000	1392.0	.7690-01	.9850-01	.1149	.9246	.5889-02	.3939-02	.6710	4.900	578.3
184	90.000	.74000	1393.0	.1280-01	.1560-01	.1760-01	.9246	.9031-03	.6548-03	.1340	1.015	543.5
184	90.000	.76500	1394.0	.7750-01	.9900-01	.1152	.9246	.5902-02	.3968-02	.6840	4.997	576.5
184	90.000	.77100	1395.0	.7920-01	.1011	.1176	.9246	.6023-02	.4057-02	.7020	5.130	575.8
184	90.000	.81500	1396.0	.7610-01	.9720-01	.1131	.9246	.5791-02	.3899-02	.6740	5.007	576.0
184	90.000	.83700	1397.0	.7680-01	.9810-01	.1141	.9246	.5844-02	.3933-02	.6790	4.962	576.2
184	90.000	.88400	1398.0	.5780-01	.7330-01	.8490-01	.9246	.4350-02	.2958-02	.5220	3.822	572.4
184	90.000	.89400	1399.0	.7100-01	.8990-01	.1040	.9246	.5327-02	.3635-02	.6460	4.732	571.1
184	90.000	.90700	1400.0	.5330-01	.6850-01	.8010-01	.9246	.4103-02	.2731-02	.4610	3.362	580.0
184	90.000	.91700	1401.0	.5420-01	.6980-01	.8180-01	.9246	.4189-02	.2776-02	.4640	3.385	581.5

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR69)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
184	90.000	.93200	1402.0	.5990-01	.7780-01	.9160-01	.9246	.4693-02	.3066-02	.4990	3.631	586.0
184	90.000	.93900	1403.0	.8020-01	.1057	.1260	.9246	.6454-02	.4109-02	.6390	4.626	593.5
185	95.000	.13560	1484.0	.5710-01	.7180-01	.8250-01	.9249	.4229-02	.2924-02	.5330	3.917	566.4
185	95.000	.13890	1486.0	.4010-01	.5050-01	.5810-01	.9249	.2975-02	.2057-02	.3750	2.752	566.5
185	95.000	.14550	1487.0	.4710-01	.5930-01	.6820-01	.9249	.3495-02	.2414-02	.4390	3.224	566.8
185	95.000	.14730	1488.0	.5080-01	.6410-01	.7380-01	.9249	.3780-02	.2601-02	.4690	3.443	568.3
184	104.00	.10000+00	1330.0	.1911	.2673	.2794	.9446	.1431-01	.9786-02	1.285	9.204	617.5
184	104.00	.12000	1404.0	.8540-01	.1090	.1263	.9252	.6466-02	.4376-02	.7580	5.543	575.5
184	104.00	.12700	1405.0	.1232	.1619	.1919	.9252	.9828-02	.6308-02	.9870	7.154	592.4
184	104.00	.13400	1406.0	.5270-01	.6680-01	.7700-01	.9252	.3944-02	.2699-02	.4790	3.509	571.3
184	104.00	.14100	1407.0	.4720-01	.5980-01	.6890-01	.9252	.3528-02	.2419-02	.4320	3.163	570.5
184	104.00	.14800	1408.0	.4880-01	.6190-01	.7140-01	.9252	.3657-02	.2499-02	.4420	3.239	571.9
184	104.00	.15500	1409.0	.5620-01	.7150-01	.8270-01	.9252	.4238-02	.2876-02	.5020	3.671	574.4
184	104.00	.16200	1410.0	.6280-01	.8020-01	.9300-01	.9252	.4762-02	.3214-02	.5540	4.047	576.5
184	104.00	.17300	1411.0	.7650-01	.9890-01	.1154	.9252	.5912-02	.3918-02	.6510	4.741	582.7
184	104.00	.18000	1412.0	.8580-01	.1110	.1300	.9252	.6657-02	.4392-02	.7230	5.266	584.1
184	104.00	.18600	1413.0	.9080-01	.1176	.1377	.9252	.7054-02	.4651-02	.7650	5.568	584.3
184	104.00	.19300	1414.0	.9070-01	.1174	.1376	.9252	.7045-02	.4645-02	.7640	5.563	584.3
184	104.00	.20000	1415.0	.9050-01	.1173	.1375	.9252	.7043-02	.4635-02	.7590	5.525	585.0
184	104.00	.25000	1416.0	.8910-01	.1150	.1343	.9252	.6880-02	.4565-02	.7600	5.632	582.3
185	112.00	.13560	1489.0	.6040-01	.7620-01	.8740-01	.9254	.4476-02	.3096-02	.5610	4.118	567.5
185	112.00	.13730	1490.0	.5020-01	.6330-01	.7270-01	.9254	.3723-02	.2571-02	.4640	3.406	568.2
185	112.00	.13890	1491.0	.4870-01	.6160-01	.7070-01	.9254	.3623-02	.2497-02	.4490	3.291	569.0
185	112.00	.14560	1492.0	.9500-02	.1160-01	.1300-01	.9254	.6663-03	.4882-03	.1020	.7600	539.7
185	112.00	.14730	1493.0	.4330-01	.5440-01	.6220-01	.9254	.3188-02	.2216-02	.4060	2.983	565.5
184	112.50	.74000	1417.0	.9120-01	.1179	.1377	.9253	.7054-02	.4669-02	.7720	5.621	583.5
184	112.50	.75000	1418.0	.8940-01	.1154	.1346	.9253	.6894-02	.4580-02	.7630	5.557	582.3
185	112.50	.77100	1419.0	.8540-01	.1099	.1280	.9254	.6556-02	.4374-02	.7350	5.446	580.8
184	112.50	.92500	1420.0	.6230-01	.8160-01	.9620-01	.9253	.4928-02	.3191-02	.5060	3.671	590.3
184	112.50	.93200	1421.0	.6560-01	.8640-01	.1025	.9253	.5248-02	.3360-02	.5220	3.783	593.5
184	112.50	.93900	1422.0	.9020-01	.1203	.1440	.9253	.7374-02	.4621-02	.6920	5.000	599.1
184	112.50	.95300	1440.0	.6090-01	.9300-01	.9710-01	.9460	.4973-02	.3119-02	.3380	2.394	640.4
185	112.50	.96700	1441.0	.1850	.3285	.3499	.9461	.1793-01	.9480-02	.8130	5.693	663.0
185	112.50	.99400	1443.0	.1087	.1649	.1720	.9461	.8810-02	.5570-02	.6120	4.334	638.9
185	135.00	.80000-02	1331.0	.2609	.3706	.3885	.9445	.1990-01	.1336-01	1.690	12.71	622.3
184	135.00	.25000-01	1332.0	.2590	.3725	.3914	.9445	.2004-01	.1326-01	1.630	11.63	625.9
185	135.00	.50000-01	1333.0	.2706	.3898	.4096	.9445	.2099-01	.1387-01	1.698	12.10	626.3
184	135.00	.75000-01	1334.0	.1632	.2211	.2301	.9445	.1178-01	.8359-02	1.196	8.755	605.8
184	135.00	.10000+00	1335.0	.1900	.2642	.2761	.9445	.1414-01	.9729-02	1.297	9.293	615.6
184	135.00	.40000	1423.0	.8180-01	.1051	.1224	.9251	.6268-02	.4190-02	.7090	5.257	579.7
185	135.00	.92500	1424.0	.7680-01	.1025	.1230	.9251	.6304-02	.3933-02	.5860	4.234	599.7
185	140.00	.13560	1494.0	.5540-01	.6980-01	.8020-01	.9250	.4109-02	.2840-02	.5170	3.794	566.8
185	140.00	.13730	1495.0	.4750-01	.5980-01	.6870-01	.9250	.3520-02	.2433-02	.4430	3.250	566.8

IH72, RIGHT SRB CLEAN, HU/HREF (RVZR69)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
185	140.00	.13890	1496.0	.4650-01	.5860-01	.6750-01	.9250	.3459-02	.2380-02	.4290	3.146	568.6
185	140.00	.14560	1497.0	.5580-01	.7070-01	.8160-01	.9250	.4182-02	.2859-02	.5080	3.722	571.1
185	150.00	.14230	1499.0	.4850-01	.6110-01	.7040-01	.9245	.3605-02	.2483-02	.4510	3.312	567.0
185	180.00	.80000-02	1298.0	.2721	.3842	.4285	.9375	.2195-01	.1394-01	1.789	13.46	620.4
185	180.00	.15000-01	1299.0	.2132	.2836	.3092	.9375	.1584-01	.1092-01	1.647	11.71	597.9
184	180.00	.25000-01	1300.0	.3261	.4476	.4936	.9375	.2528-01	.1670-01	2.304	15.76	610.9
185	180.00	.50000-01	1301.0	.2252	.3013	.3293	.9375	.1687-01	.1154-01	1.708	11.75	600.6
184	180.00	.75000-01	1302.0	.1441	.1879	.2033	.9375	.1041-01	.7381-02	1.187	8.084	598.0
185	180.00	.10000+00	1303.0	.1699	.2271	.2481	.9375	.1271-01	.8705-02	1.294	9.342	600.1
184	225.00	.98000	1425.0	.9170-01	.1173	.1323	.9296	.6776-02	.4698-02	.8080	5.903	576.9
184	225.00	.99400	1426.0	.1027	.1320	.1495	.9296	.7654-02	.5261-02	.8870	6.472	580.2
184	263.00	.13600	1336.0	.2240-01	.2710-01	.3070-01	.9220	.1574-02	.1147-02	.2470	1.843	533.6
185	263.00	.20000	1472.0	.1230-01	.1490-01	.1680-01	.9220	.8630-03	.6324-03	.1380	1.034	530.2
185	263.00	.30000	1337.0	.2020-01	.2440-01	.2770-01	.9220	.1417-02	.1036-02	.2250	1.713	531.3
185	263.00	.40000	1473.0	.1990-01	.2420-01	.2750-01	.9220	.1411-02	.1019-02	.2140	1.592	538.8
185	263.00	.50000	1474.0	.2130-01	.2590-01	.2950-01	.9220	.1509-02	.1092-02	.2310	1.719	537.4
185	263.00	.60000	1475.0	.3160-01	.3850-01	.4390-01	.9220	.2247-02	.1621-02	.3390	2.527	539.3
185	263.00	.75000	1338.0	.3830-01	.4650-01	.5290-01	.9220	.2708-02	.1961-02	.4150	3.093	537.1
185	263.00	.81500	1339.0	.3710-01	.4500-01	.5120-01	.9220	.2621-02	.1901-02	.4040	3.015	536.0
185	263.00	.83700	1340.0	.3440-01	.4180-01	.4750-01	.9220	.2434-02	.1763-02	.3740	2.785	536.8
185	263.00	.88400	1341.0	.3170-01	.3850-01	.4390-01	.9220	.2249-02	.1622-02	.3400	2.530	539.2
185	263.00	.89400	1342.0	.3190-01	.3890-01	.4430-01	.9220	.2270-02	.1632-02	.3390	2.522	541.0
185	263.00	.90700	1343.0	.2960-01	.3620-01	.4140-01	.9220	.2123-02	.1517-02	.3100	2.302	544.3
185	263.00	.92800	1477.0	.3430-01	.4220-01	.4840-01	.9220	.2481-02	.1757-02	.3520	2.607	548.6
184	263.00	.93900	1344.0	.5000-01	.6170-01	.7110-01	.9220	.3640-02	.2560-02	.5040	3.729	551.9
185	270.00	.80000-02	1304.0	.1862	.2363	.2739	.9246	.1403-01	.9537-02	1.682	13.19	572.4
185	270.00	.50000-01	1306.0	.1087	.1351	.1542	.9246	.7899-02	.5568-02	1.066	7.486	557.4
184	270.00	.75000-01	1307.0	.7430-01	.9160-01	.1038	.9246	.5318-02	.3805-02	.7550	5.326	550.3
185	270.00	.10000+00	1308.0	.9260-01	.1156	.1324	.9246	.6781-02	.4745-02	.8920	6.570	560.7
184	270.00	.11500	1345.0	.7130-01	.8890-01	.1032	.9220	.5284-02	.3649-02	.6890	5.075	560.1
184	277.00	.13600	1346.0	.2100-01	.2550-01	.2910-01	.9220	.1488-02	.1076-02	.2270	1.694	537.6
184	277.00	.30000	1347.0	.2380-01	.2880-01	.3260-01	.9220	.1667-02	.1220-02	.2650	2.018	531.2
185	277.00	.40000	1464.0	.1950-01	.2380-01	.2710-01	.9220	.1388-02	.9990-03	.2080	1.548	540.4
185	277.00	.60000	1466.0	.3240-01	.3950-01	.4510-01	.9220	.2308-02	.1658-02	.3440	2.559	541.3
185	277.00	.70000	1467.0	.4140-01	.5080-01	.5830-01	.9220	.2987-02	.2120-02	.4260	3.160	547.6
184	277.00	.75000	1348.0	.4660-01	.5690-01	.6490-01	.9220	.3321-02	.2387-02	.4960	3.687	541.2
184	277.00	.81500	1349.0	.4560-01	.5560-01	.6340-01	.9220	.3248-02	.2336-02	.4860	3.613	540.9
184	277.00	.83700	1350.0	.4140-01	.5060-01	.5770-01	.9220	.2957-02	.2121-02	.4380	3.259	542.2
184	277.00	.88400	1351.0	.4020-01	.4890-01	.5580-01	.9220	.2856-02	.2056-02	.4290	3.192	540.2
184	277.00	.89400	1352.0	.4060-01	.4960-01	.5660-01	.9220	.2898-02	.2077-02	.4280	3.182	542.7
185	277.00	.90000	1468.0	.3900-01	.4780-01	.5470-01	.9220	.2804-02	.1996-02	.4040	2.999	546.1
185	277.00	.90700	1353.0	.3990-01	.4900-01	.5620-01	.9220	.2877-02	.2045-02	.4130	3.064	546.7
185	277.00	.92100	1469.0	.3890-01	.4780-01	.5490-01	.9220	.2812-02	.1991-02	.3980	2.951	548.7

IH72, RIGHT SRB CLEAN.

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
185	277.00	.92300	1470.0	.4360-01	.5380-01	.6180-01	.9220	.3168-02	.2233-02	.4420	3.272	550.8
185	277.00	.93700	1471.0	.4910-01	.6070-01	.7000-01	.9220	.3584-02	.2516-02	.4930	3.643	552.9
184	277.00	.93900	1354.0	.6230-01	.7740-01	.8970-01	.9220	.4594-02	.3189-02	.6090	4.490	557.9
185	335.00	.11000	1309.0	.9930-01	.1243	.1423	.9250	.7289-02	.5088-02	.9460	6.961	562.8
184	337.50	.74000	1355.0	.3740-01	.4580-01	.5230-01	.9220	.2678-02	.1916-02	.3930	2.922	543.5
184	337.50	.75000	1356.0	.3500-01	.4280-01	.4880-01	.9220	.2500-02	.1794-02	.3710	2.807	541.9
185	337.50	.76500	1357.0	.3660-01	.4470-01	.5110-01	.9220	.2618-02	.1875-02	.3860	2.913	543.1
185	337.50	.92500	1359.0	.3670-01	.4510-01	.5180-01	.9220	.2654-02	.1881-02	.3770	2.793	548.3
185	337.50	.93200	1360.0	.4110-01	.5060-01	.5820-01	.9220	.2982-02	.2105-02	.4180	3.094	550.2
185	337.50	.93900	1361.0	.4900-01	.6080-01	.7020-01	.9220	.3595-02	.2510-02	.4860	3.588	555.2

LEFT SRB

PARAMETRIC DATA

ALPHA = -5.000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
73	-5.000	-8.900	4.020	72.20	749.0	177.0	.4630	5.237	2620.	.2195-03	.1425-06	4.037
74	-5.000	-8.900	4.020	72.30	749.0	177.0	.4630	5.242	2620.	.2197-03	.1425-06	4.040
75	-5.000	-8.900	4.020	72.10	748.0	176.8	.4630	5.233	2619.	.2195-03	.1424-06	4.038

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
73	.5096-01	.1144-01
74	.5099-01	.1144-01
75	.5094-01	.1144-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
73	.00000	.11500	1000.0	.2267	.2943	.3513	.9228	.1790-01	.1155-01	1.882	13.68	586.0
73	.00000	.20000	1001.0	.1252	.1564	.1809	.9228	.9221-02	.6381-02	1.198	8.820	561.2
73	.00000	.25000	1003.0	.7710-01	.9640-01	.1116	.9228	.5690-02	.3927-02	.7330	5.392	562.3
73	.00000	.30000	1004.0	.8380-01	.1049	.1215	.9228	.6190-02	.4273-02	.7980	5.870	562.2
73	.00000	.50000	1006.0	.1235	.1574	.1849	.9228	.9424-02	.6295-02	1.096	7.911	574.8
73	.00000	.55000	1007.0	.1238	.1579	.1858	.9228	.9468-02	.6310-02	1.094	7.889	575.6
73	.00000	.60000	1008.0	.1288	.1630	.1904	.9228	.9704-02	.6566-02	1.174	8.606	570.1
73	.00000	.65000	1009.0	.1248	.1579	.1845	.9228	.9401-02	.6359-02	1.136	8.270	570.3
73	.00000	.70000	1010.0	.1214	.1537	.1796	.9228	.9154-02	.6187-02	1.103	8.365	570.6
74	.00000	.72400	1232.0	.3990-01	.5010-01	.5810-01	.9228	.2961-02	.2035-02	.3760	2.852	564.1
74	.00000	.74000	1242.0	.1661	.2183	.2634	.9228	.1343-01	.8467-02	1.325	10.11	592.5
73	.00000	.75000	1011.0	.1815	.2415	.2944	.9228	.1500-01	.9250-02	1.395	10.80	598.1
74	.00000	.77100	1251.0	.8100-01	.1017	.1182	.9228	.6026-02	.4129-02	.7580	5.926	565.3
73	.00000	.80000	1012.0	.1198	.1559	.1864	.9228	.9500-02	.6106-02	.9880	7.430	587.1
73	.00000	.87500	1013.0	.1386	.1840	.2238	.9228	.1141-01	.7063-02	1.072	7.431	597.1
74	.00000	.93200	1257.0	.1187	.1517	.1787	.9228	.9113-02	.6054-02	1.042	7.275	576.8
74	4.3800	.96500	1220.0	.2109	.2817	.3077	.9374	.1569-01	.1075-01	1.603	11.78	595.9
74	4.3800	.97500	1221.0	.2326	.3120	.3415	.9374	.1741-01	.1186-01	1.744	12.75	601.9

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF

(RVZL10)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
74	4.3800	.98500	1222.0	.2140	.2864	.3131	.9374	.1597-01	.1091-01	1.615	11.70	600.9
74	4.3800	.99500	1223.0	.1762	.2364	.2587	.9374	.1319-01	.8966-02	1.322	9.535	601.9
74	5.0000	.90000-01	1210.0	.2854	.3736	.4078	.9364	.2079-01	.1455-01	2.306	16.73	590.4
74	5.0000	10.000	1211.0	.3067	.3994	.4350	.9364	.2218-01	.1564-01	2.525	18.34	587.5
74	20.000	.96500	1224.0	.1898	.2543	.2851	.9341	.1453-01	.9679-02	1.429	10.31	601.3
74	20.000	.97500	1225.0	.2173	.2922	.3281	.9341	.1673-01	.1108-01	1.618	11.67	602.9
74	20.000	.98500	1226.0	.1956	.2626	.2946	.9341	.1502-01	.9974-02	1.464	10.63	602.2
74	35.000	10.000	1208.0	.2601	.3343	.3760	.9306	.1917-01	.1326-01	2.237	16.31	580.3
74	40.000	.96500	1228.0	.7780-01	.9950-01	.1117	.9304	.5697-02	.3967-02	.6810	5.006	577.3
74	40.000	.97500	1229.0	.1007	.1312	.1488	.9304	.7588-02	.5136-02	.8290	6.060	587.6
74	40.000	.99500	1231.0	.1003	.1326	.1517	.9304	.7735-02	.5115-02	.7870	5.700	595.0
73	45.000	.11500	1020.0	.1326	.1692	.2002	.9220	.1020-01	.6759-02	1.170	8.550	575.8
73	45.000	.14300	1021.0	.1088	.1373	.1609	.9220	.8201-02	.5543-02	.9990	7.328	568.7
73	45.000	.17100	1022.0	.1432	.1801	.2104	.9220	.1072-01	.7300-02	1.336	9.809	566.0
73	45.000	.20000	1023.0	.1334	.1662	.1928	.9220	.9824-02	.6799-02	1.290	9.507	559.2
73	45.000	.30000	1024.0	.8910-01	.1106	.1278	.9220	.6515-02	.4542-02	.8760	6.467	556.0
73	45.000	.55000	1027.0	.1395	.1773	.2090	.9220	.1065-01	.7111-02	1.250	9.086	573.2
73	45.000	.70000	1030.0	.1200	.1530	.1807	.9220	.9209-02	.6118-02	1.065	7.919	574.9
73	45.000	.80000	1031.0	.1179	.1505	.1780	.9220	.9071-02	.6011-02	1.041	7.735	575.8
73	45.000	.87500	1032.0	.5090-01	.6560-01	.7810-01	.9220	.3981-02	.2593-02	.4360	3.057	581.0
73	45.000	.92500	1033.0	.5540-01	.6970-01	.8140-01	.9220	.4150-02	.2822-02	.5150	3.625	566.4
74	45.000	.93200	1258.0	.8160-01	.1017	.1181	.9220	.6020-02	.4159-02	.7860	5.734	559.9
75	45.000	.93900	1264.0	.9730-01	.1223	.1428	.9220	.7275-02	.4956-02	.9070	6.580	565.3
73	50.000	.95300	1034.0	.5160-01	.6530-01	.7370-01	.9288	.3754-02	.2628-02	.4670	3.300	571.2
73	50.000	.96700	1035.0	.5240-01	.6850-01	.7870-01	.9288	.4011-02	.2670-02	.4260	3.000	589.5
73	50.000	.98000	1036.0	.9720-01	.1283	.1485	.9288	.7569-02	.4953-02	.7640	5.303	594.7
74	65.000	.43000-01	1200.0	.3227	.4240	.4976	.9264	.2537-01	.1645-01	2.578	18.69	592.3
74	65.000	.50000-01	1201.0	.2656	.3425	.3966	.9264	.2022-01	.1354-01	2.259	16.46	582.1
74	65.000	.57000-01	1202.0	.2399	.3068	.3532	.9264	.1801-01	.1223-01	2.101	15.35	577.2
74	65.000	.63000-01	1203.0	.1974	.2522	.2901	.9264	.1479-01	.1006-01	1.734	12.67	576.6
74	65.000	.90000-01	1204.0	.1857	.2367	.2718	.9264	.1386-01	.9470-02	1.647	12.05	575.0
74	65.000	.10000+00	1205.0	.2504	.3217	.3715	.9264	.1894-01	.1277-01	2.158	15.74	579.9
75	76.000	.12000	1290.0	.1729	.2229	.2660	.9220	.1355-01	.8805-02	1.468	10.42	581.6
75	76.000	.12700	1291.0	.1697	.2201	.2640	.9220	.1345-01	.8644-02	1.412	10.11	585.0
75	76.000	.13400	1292.0	.1839	.2448	.3004	.9220	.1530-01	.9370-02	1.411	9.969	597.8
75	76.000	.17300	1293.0	.1536	.1931	.2256	.9220	.1149-01	.7823-02	1.430	10.44	565.5
75	76.000	.18000	1294.0	.1347	.1682	.1955	.9220	.9960-02	.6860-02	1.287	9.318	560.8
75	76.000	.18600	1295.0	.1236	.1535	.1776	.9220	.9048-02	.6295-02	1.208	8.856	556.5
75	76.000	.19300	1296.0	.9880-01	.1224	.1412	.9220	.7190-02	.5035-02	.9810	7.223	553.6
75	76.000	.20000	1297.0	.8550-01	.1055	.1213	.9220	.6181-02	.4353-02	.8590	6.317	551.0
73	90.000	.20000-02	1039.0	.4765	.6608	.6263	.9571	.3192-01	.2428-01	3.260	22.99	614.7
73	90.000	.10000+00	1042.0	.4214	.5509	.6527	.9246	.3326-01	.2148-01	3.422	24.84	589.6
73	90.000	.13400	1045.0	.2565	.4163	.6394	.9220	.3258-01	.1307-01	1.275	8.984	651.4

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
73	90.000	.17300	1046.0	.1336	.1676	.1954	.9220	.9960-02	.6807-02	1.256	9.232	564.4
73	90.000	.18000	1047.0	.1010	.1247	.1436	.9220	.7318-02	.5147-02	1.013	7.495	552.0
73	90.000	.18600	1048.0	.9150-01	.1139	.1320	.9220	.6727-02	.4662-02	.8870	6.542	558.6
73	90.000	.19300	1049.0	.7350-01	.9120-01	.1055	.9220	.5375-02	.3746-02	.7220	5.330	556.2
73	90.000	.20000	1050.0	.5990-01	.7410-01	.8550-01	.9220	.4358-02	.3052-02	.5950	4.394	554.0
73	90.000	.25000	1051.0	.4760-01	.5870-01	.6740-01	.9220	.3436-02	.2426-02	.4820	3.569	550.2
73	90.000	.30000	1052.0	.5010-01	.6200-01	.7140-01	.9220	.3639-02	.2555-02	.5010	3.703	552.8
73	90.000	.50000	1054.0	.6700-01	.8430-01	.9850-01	.9220	.5022-02	.3412-02	.6220	4.492	566.6
73	90.000	.60000	1055.0	.8440-01	.1053	.1223	.9220	.6231-02	.4303-02	.8120	5.943	560.2
73	90.000	.75000	1057.0	.2762	.3870	.4992	.9220	.2544-01	.1408-01	1.841	13.87	618.2
73	90.000	.80000	1058.0	.2560-01	.3240-01	.3810-01	.9220	.1940-02	.1303-02	.2320	1.700	570.9
73	90.000	.87500	1059.0	.3800-01	.7020-01	.1335	.9220	.6804-02	.1938-02	.1580	1.061	667.2
73	90.000	.92500	1060.0	.2940-01	.3660-01	.4240-01	.9220	.2159-02	.1498-02	.2850	2.023	558.3
73	90.000	.95300	1061.0	.3130-01	.3900-01	.4450-01	.9250	.2268-02	.1597-02	.3030	2.164	559.0
73	90.000	.96700	1062.0	.3940-01	.4970-01	.5710-01	.9250	.2910-02	.2010-02	.3650	2.609	567.3
73	90.000	.98000	1063.0	.4730-01	.5990-01	.6920-01	.9250	.3527-02	.2409-02	.4270	3.006	571.7
73	90.000	.99400	1064.0	.5200-01	.6640-01	.7710-01	.9250	.3928-02	.2651-02	.4580	3.229	576.1
73	135.00	.14300	1066.0	.1016	.1310	.1563	.9220	.7967-02	.5177-02	.8640	6.293	582.1
73	135.00	.20000	1068.0	.2720-01	.3380-01	.3920-01	.9220	.1997-02	.1387-02	.2650	1.957	557.6
73	135.00	.30000	1069.0	.2120-01	.2630-01	.3030-01	.9220	.1546-02	.1082-02	.2100	1.554	554.4
73	135.00	.50000	1070.0	.7550-01	.9480-01	.1106	.9220	.5635-02	.3850-02	.7100	5.133	564.5
73	135.00	.60000	1071.0	.6850-01	.8530-01	.9880-01	.9220	.5037-02	.3489-02	.6630	4.889	558.8
73	135.00	.70000	1072.0	.5560-01	.7000-01	.8190-01	.9220	.4175-02	.2832-02	.5140	3.838	567.3
74	135.00	.72400	1237.0	.8140-01	.1034	.1218	.9220	.6210-02	.4149-02	.7300	5.548	572.9
74	135.00	.74000	1243.0	.1344	.1741	.2088	.9220	.1064-01	.6851-02	1.123	8.541	585.0
74	135.00	.75000	1246.0	.8360-01	.1105	.1347	.9220	.6868-02	.4262-02	.6560	4.950	595.0
74	135.00	.77100	1252.0	.9230-01	.1163	.1362	.9220	.6943-02	.4708-02	.8540	6.464	567.5
73	135.00	.80000	1073.0	.3240-01	.4100-01	.4810-01	.9220	.2450-02	.1653-02	.2970	2.215	569.2
74	135.00	.93200	1259.0	.3710-01	.4560-01	.5230-01	.9220	.2664-02	.1894-02	.3820	2.808	547.0
75	135.00	.93900	1265.0	.3120-01	.3840-01	.4420-01	.9220	.2249-02	.1590-02	.3170	2.313	549.3
73	135.00	.95300	1074.0	.3590-01	.4470-01	.5110-01	.9245	.2604-02	.1828-02	.3470	2.467	559.1
73	135.00	.98000	1076.0	.3890-01	.4940-01	.5730-01	.9245	.2921-02	.1980-02	.3470	2.445	573.4
75	138.00	.95300	1266.0	.3750-01	.4640-01	.5270-01	.9246	.2686-02	.1910-02	.3730	2.640	553.2
75	138.00	.96700	1268.0	.3650-01	.4620-01	.5350-01	.9246	.2725-02	.1857-02	.3290	2.301	571.3
75	138.00	.98000	1270.0	.3250-01	.4130-01	.4780-01	.9246	.2437-02	.1654-02	.2900	2.016	572.9
75	138.00	.99400	1272.0	.2120-01	.2690-01	.3110-01	.9246	.1586-02	.1078-02	.1900	1.329	572.2
75	162.00	.95300	1267.0	.2570-01	.3240-01	.3710-01	.9259	.1887-02	.1311-02	.2380	1.722	567.0
75	162.00	.96700	1269.0	.1060-01	.1360-01	.1580-01	.9259	.8052-03	.5395-03	.9100-01	.6540	580.4
75	162.00	.98000	1271.0	.2130-01	.2760-01	.3210-01	.9259	.1637-02	.1087-02	.1790	1.287	583.6
73	180.00	.20000	1078.0	.4870-01	.6080-01	.7060-01	.9220	.3598-02	.2481-02	.4670	3.437	560.8
73	180.00	.40000	1079.0	.3280-01	.4100-01	.4780-01	.9220	.2436-02	.1669-02	.3100	2.198	563.3
73	180.00	.60000	1080.0	.4440-01	.5560-01	.6470-01	.9220	.3299-02	.2261-02	.4200	3.087	563.3
73	180.00	.70000	1081.0	.2800-01	.3530-01	.4130-01	.9220	.2105-02	.1429-02	.2600	1.961	567.0

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF (RVZL10)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
74	180.00	.74000	1238.0	.6100-01	.7790-01	.9230-01	.9220	.4705-02	.3110-02	.5360	4.038	576.6
73	180.00	.75000	1082.0	.4190-01	.5370-01	.6360-01	.9220	.3243-02	.2137-02	.3660	2.866	577.5
74	180.00	.77100	1247.0	.5160-01	.6450-01	.7490-01	.9220	.3819-02	.2632-02	.4940	3.872	561.1
73	180.00	.80000	1083.0	.4260-01	.5440-01	.6440-01	.9220	.3283-02	.2173-02	.3760	2.791	576.1
74	180.00	.93200	1253.0	.2150-01	.2680-01	.3110-01	.9220	.1588-02	.1094-02	.2050	1.483	561.1
74	180.00	.93900	1260.0	.1710-01	.2140-01	.2490-01	.9220	.1271-02	.8701-03	.1610	1.154	563.8
73	180.00	.96700	1085.0	.5700-02	.7400-02	.8400-02	.9278	.4302-03	.2905-03	.4800-01	.3400	582.3
73	180.00	.98000	1086.0	.1330-01	.1720-01	.1980-01	.9278	.1011-02	.6789-03	.1120	.7870	584.3
73	180.00	.99400	1087.0	.9100-02	.1190-01	.1370-01	.9278	.6997-03	.4658-03	.7500-01	.5270	587.1
75	198.00	.95300	1276.0	.5380-01	.6830-01	.7630-01	.9304	.3888-02	.2739-02	.4830	3.558	572.2
75	198.00	.98000	1284.0	.1040-01	.1340-01	.1520-01	.9304	.7749-03	.5273-03	.8600-01	.6190	585.4
73	225.00	.11500	1088.0	.1202	.1547	.1839	.9223	.9375-02	.6125-02	1.028	7.497	581.0
73	225.00	.17700	1090.0	.6170-01	.7700-01	.8920-01	.9223	.4545-02	.3147-02	.5960	4.388	559.7
73	225.00	.60000	1091.0	.3770-01	.4710-01	.5480-01	.9223	.2791-02	.1921-02	.3590	2.642	562.1
73	225.00	.70000	1092.0	.2550-01	.3190-01	.3700-01	.9223	.1887-02	.1297-02	.2410	1.794	562.8
74	225.00	.72400	1233.0	.4030-01	.5060-01	.5910-01	.9223	.3013-02	.2053-02	.3750	2.861	566.1
74	225.00	.74000	1239.0	.2460-01	.3070-01	.3570-01	.9223	.1818-02	.1255-02	.2360	1.810	561.0
74	225.00	.75000	1244.0	.5540-01	.7060-01	.8320-01	.9223	.4243-02	.2825-02	.4920	3.775	574.8
74	225.00	.77100	1248.0	.3980-01	.5020-01	.5870-01	.9223	.2991-02	.2032-02	.3690	2.829	567.5
73	225.00	.80000	1093.0	.3870-01	.4870-01	.5670-01	.9223	.2892-02	.1975-02	.3620	2.662	565.4
74	225.00	.93200	1254.0	.2480-01	.3140-01	.3690-01	.9223	.1880-02	.1267-02	.2260	1.608	570.5
74	225.00	.93900	1261.0	.2490-01	.3160-01	.3720-01	.9223	.1896-02	.1271-02	.2240	1.583	572.5
75	238.00	.95300	1277.0	.6240-01	.7990-01	.8550-01	.9383	.4356-02	.3179-02	.5430	3.955	577.5
75	238.00	.96700	1281.0	.1940-01	.2540-01	.2740-01	.9383	.1394-02	.9879-03	.1560	1.151	590.0
75	238.00	.98000	1285.0	.4180-01	.5470-01	.5900-01	.9383	.3003-02	.2130-02	.3380	2.488	589.6
73	256.00	.11500	1094.0	.1339	.1717	.2015	.9238	.1027-01	.6822-02	1.159	8.458	579.0
73	256.00	.12800	1095.0	.6980-01	.8630-01	.9860-01	.9238	.5024-02	.3557-02	.6950	5.139	553.5
73	256.00	.14600	1096.0	.7180-01	.8950-01	.1029	.9238	.5244-02	.3657-02	.6890	5.077	560.4
74	256.00	.20000	1097.0	.7950-01	.9790-01	.1114	.9238	.5682-02	.4052-02	.8060	5.968	550.0
74	256.00	.40000	1098.0	.5150-01	.6370-01	.7280-01	.9238	.3711-02	.2627-02	.5130	3.611	553.7
74	256.00	.60000	1099.0	.3750-01	.4640-01	.5300-01	.9238	.2704-02	.1910-02	.3710	2.724	554.6
74	256.00	.80000	1100.0	.9200-02	.1150-01	.1330-01	.9238	.6758-03	.4703-03	.8800-01	.6490	561.4
74	256.00	.87500	1101.0	.1810-01	.2300-01	.2680-01	.9238	.1367-02	.9236-03	.1620	1.132	573.1
74	270.00	.50000-01	1102.0	.2619	.3400	.3546	.9431	.1808-01	.1335-01	2.178	15.84	585.9
74	270.00	.10000+00	1103.0	.2429	.3136	.3267	.9431	.1666-01	.1238-01	2.057	14.98	582.9
74	270.00	.11500	1104.0	.1379	.1764	.2055	.9246	.1048-01	.7031-02	1.207	8.812	577.3
74	270.00	.14600	1105.0	.9160-01	.1137	.1295	.9246	.6604-02	.4671-02	.9010	6.653	556.0
74	270.00	.72400	1234.0	.5180-01	.6350-01	.7170-01	.9246	.3656-02	.2639-02	.5360	3.988	545.9
74	270.00	.74000	1240.0	.7000-01	.8650-01	.9820-01	.9246	.5007-02	.3568-02	.7010	5.222	552.4
74	270.00	.77100	1249.0	.3980-01	.4930-01	.5600-01	.9246	.2856-02	.2030-02	.3970	3.076	553.5
74	270.00	.93200	1255.0	.8450-01	.1057	.1212	.9246	.6180-02	.4310-02	.8050	5.785	562.3
74	270.00	.93900	1262.0	.8550-01	.1082	.1251	.9246	.6380-02	.4359-02	.7770	5.637	570.7
74	270.00	.95300	1110.0	.9050-01	.1151	.1189	.9441	.6065-02	.4614-02	.8080	5.687	573.8

IH72, OTS W/PROTUBERANCES, LEFT SRB

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HI/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
74	270.00	.96700	1111.0	.4220-01	.5550-01	.5760-01	.9441	.2939-02	.2153-02	.3380	2.369	592.1
74	270.00	.98000	1112.0	.6570-01	.8640-01	.8980-01	.9441	.4576-02	.3351-02	.5250	3.656	592.4
74	270.00	.99400	1113.0	.8290-01	.1089	.1132	.9441	.5770-02	.4229-02	.6640	4.656	592.0
74	284.00	.11500	1114.0	.1470	.1889	.2200	.9251	.1122-01	.7493-02	1.264	9.221	580.2
74	284.00	.12800	1115.0	.6400-01	.7890-01	.8930-01	.9251	.4554-02	.3261-02	.6440	4.764	551.5
74	284.00	.14600	1116.0	.7670-01	.9520-01	.1083	.9251	.5519-02	.3911-02	.7520	5.551	556.6
74	284.00	.20000	1117.0	.6990-01	.8640-01	.9790-01	.9251	.4994-02	.3565-02	.6990	5.167	552.9
74	284.00	.40000	1118.0	.6910-01	.8550-01	.9700-01	.9251	.4945-02	.3521-02	.6850	4.838	554.3
74	284.00	.60000	1119.0	.6240-01	.7720-01	.8760-01	.9251	.4464-02	.3181-02	.6200	4.554	553.9
74	284.00	.80000	1120.0	.5150-01	.6470-01	.7420-01	.9251	.3782-02	.2624-02	.4800	3.586	566.0
74	284.00	.87500	1121.0	.1606	.2093	.2463	.9251	.1256-01	.8190-02	1.320	9.221	587.8
75	302.00	.98000	1282.0	.1512	.2029	.2085	.9460	.1062-01	.7699-02	1.130	8.181	601.6
75	302.00	.99400	1286.0	.1579	.2134	.2195	.9460	.1118-01	.8043-02	1.157	7.964	604.6
74	315.00	.92500	1122.0	.1681	.2164	.2525	.9251	.1288-01	.8572-02	1.438	10.48	581.2
74	315.00	.93900	1124.0	.1036	.1295	.1479	.9251	.7539-02	.5282-02	.9890	7.281	561.7
74	315.00	.95300	1125.0	.9630-01	.1205	.1376	.9251	.7018-02	.4909-02	.9160	6.742	562.3
74	315.00	.96700	1126.0	.9790-01	.1220	.1390	.9251	.7087-02	.4991-02	.9460	6.974	559.3
74	315.00	.98000	1127.0	.8670-01	.1086	.1242	.9251	.6331-02	.4419-02	.8210	5.936	563.3
74	315.00	.99400	1128.0	.8640-01	.1083	.1240	.9251	.6322-02	.4406-02	.8150	5.954	563.9
74	315.00	.70000	1129.0	.7280-01	.9130-01	.1045	.9251	.5329-02	.3710-02	.6850	5.069	564.3
74	315.00	.72400	1235.0	.7130-01	.9030-01	.1040	.9251	.5303-02	.3638-02	.6500	4.858	570.4
74	315.00	.74000	1241.0	.1178	.1496	.1728	.9251	.8810-02	.6005-02	1.058	7.984	572.8
74	315.00	.75000	1245.0	.1208	.1531	.1765	.9251	.9002-02	.6158-02	1.093	8.313	571.4
74	315.00	.77100	1250.0	.5680-01	.7030-01	.7970-01	.9251	.4064-02	.2897-02	.5660	4.463	553.7
74	315.00	.80000	1130.0	.1110	.1415	.1639	.9251	.8355-02	.5658-02	.9830	7.308	575.2
74	315.00	.87500	1131.0	.1277	.1693	.2020	.9251	.1030-01	.6511-02	.9920	6.881	596.5
74	315.00	1265.0	1132.0	.9710-01	.1241	.1440	.9251	.7344-02	.4950-02	.8510	5.980	576.9
75	315.00	1074.0	1256.0	.1082	.1394	.1628	.9251	.8300-02	.5519-02	.9240	6.473	581.6
74	315.00	1075.0	1263.0	.1253	.1628	.1913	.9251	.9743-02	.6380-02	1.036	7.362	586.0
74	315.00	1076.0	1133.0	.1679	.2147	.2203	.9454	.1123-01	.8562-02	1.473	10.31	577.0
74	315.00	1077.0	1134.0	.1584	.2107	.2173	.9454	.1108-01	.8074-02	1.217	8.539	598.2
74	315.00	1057.0	1135.0	.2025	.2705	.2790	.9454	.1423-01	.1033-01	1.539	10.69	599.9
74	315.00	1058.0	1136.0	.2095	.2813	.2903	.9454	.1480-01	.1068-01	1.569	10.78	602.1
74	330.00	.72400	1236.0	.1448	.1865	.2187	.9245	.1115-01	.7381-02	1.235	9.411	581.6
74	335.00	.43000-01	1212.0	.3401	.4480	.4717	.9421	.2405-01	.1734-01	2.697	19.54	593.4
74	335.00	.50000-01	1213.0	.3068	.4028	.4238	.9421	.2161-01	.1564-01	2.457	17.82	591.9
74	335.00	.57000-01	1214.0	.3049	.3972	.4172	.9421	.2127-01	.1555-01	2.507	18.22	587.7
74	335.00	.63000-01	1215.0	.2820	.3664	.3847	.9421	.1961-01	.1438-01	2.336	16.98	586.5
74	335.00	.90000-01	1216.0	.2771	.3610	.3792	.9421	.1934-01	.1413-01	2.277	16.54	587.8
74	335.00	.10000+00	1217.0	.3008	.3909	.4104	.9421	.2092-01	.1533-01	2.490	18.10	586.6
75	342.00	.95300	1275.0	.2010	.2616	.2751	.9418	.1401-01	.1024-01	1.654	11.30	586.9
75	342.00	.96700	1279.0	.2474	.3361	.3570	.9418	.1818-01	.1260-01	1.787	12.37	606.6
75	342.00	.98000	1283.0	.2359	.3168	.3357	.9418	.1710-01	.1202-01	1.760	11.98	601.9

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
75	342.00	.99400	1287.0	.1989	.2649	.2801	.9418	.1427-01	.1013-01	1.521	10.37	598.2
73	355.00	.95300	1016.0	.1965	.2582	.2767	.9393	.1410-01	.1002-01	1.570	10.98	592.2
73	355.00	.96700	1017.0	.2398	.3265	.3538	.9393	.1803-01	.1222-01	1.723	12.03	608.0
73	355.00	.98000	1018.0	.1934	.2600	.2806	.9393	.1430-01	.9855-02	1.440	10.02	602.8
73	355.00	.99400	1019.0	.1663	.2240	.2418	.9393	.1232-01	.8478-02	1.234	8.500	603.4

PARAMETRIC DATA

ALPHA = -5.000 BETA = 9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
70	-4.940	9.000	4.020	72.20	749.0	177.0	.4630	5.236	2621.	.2194-03	.1425-06	4.034
71	-4.940	9.000	4.020	72.20	749.0	177.0	.4630	5.237	2621.	.2194-03	.1425-06	4.035
72	-4.940	9.000	4.020	72.30	749.0	177.0	.4630	5.242	2621.	.2196-03	.1425-06	4.039

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
70	.5096-01	.1145-01
71	.5097-01	.1145-01
72	.5099-01	.1144-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
70	.00000	.11500	1000.0	.1199	.1529	.1799	.9228	.9168-02	.6111-02	1.060	7.748	575.7
70	.00000	.20000	1001.0	.6880-01	.8530-01	.9800-01	.9228	.4995-02	.3506-02	.6800	5.024	555.2
70	.00000	.25000	1003.0	.5000-01	.6210-01	.7160-01	.9228	.3647-02	.2547-02	.4880	3.602	557.4
70	.00000	.30000	1004.0	.6710-01	.8320-01	.9570-01	.9228	.4875-02	.3417-02	.6610	4.879	555.8
70	.00000	.50000	1006.0	.6410-01	.8050-01	.9350-01	.9228	.4764-02	.3269-02	.6030	4.371	564.8
70	.00000	.55000	1007.0	.3720-01	.4660-01	.5410-01	.9228	.2759-02	.1894-02	.3490	2.533	564.7
70	.00000	.60000	1008.0	.4270-01	.5340-01	.6180-01	.9228	.3149-02	.2174-02	.4060	2.986	562.5
70	.00000	.65000	1009.0	.3950-01	.4940-01	.5720-01	.9228	.2914-02	.2013-02	.3770	2.753	562.1
70	.00000	.70000	1010.0	.9190-01	.1155	.1343	.9228	.6845-02	.4683-02	.8580	6.518	566.0
71	.00000	.72400	1232.0	.3860-01	.4820-01	.5570-01	.9228	.2837-02	.1968-02	.3720	2.823	560.3
71	.00000	.74000	1242.0	.1772	.2282	.2706	.9228	.1379-01	.9032-02	1.514	11.61	581.6
70	.00000	.75000	1011.0	.1770	.2314	.2779	.9228	.1416-01	.9018-02	1.436	11.17	589.9
71	.00000	.77100	1251.0	.1550-01	.1920-01	.2200-01	.9228	.1122-02	.7919-03	.1560	1.224	552.7
70	.00000	.80000	1012.0	.3980-01	.5060-01	.5940-01	.9228	.3025-02	.2026-02	.3550	2.685	574.1
70	.00000	.87500	1013.0	.2600-01	.3360-01	.3990-01	.9228	.2034-02	.1323-02	.2190	1.528	583.7
71	.00000	.93200	1257.0	.4800-01	.6020-01	.6980-01	.9228	.3558-02	.2446-02	.4530	3.182	564.0
71	4.3800	.96500	1220.0	.6230-01	.8020-01	.8560-01	.9391	.4361-02	.3177-02	.5340	3.956	581.3
71	4.3800	.97500	1221.0	.9610-01	.1253	.1341	.9391	.6835-02	.4899-02	.7890	5.807	588.2

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF (RVZL14)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
71	4.3800	.98500	1222.0	.9540-01	.1242	.1330	.9391	.6776-02	.4862-02	.7850	5.721	587.8
71	4.3800	.99500	1223.0	.8540-01	.1112	.1191	.9391	.6069-02	.4352-02	.7010	5.094	588.1
71	5.0000	.90000-01	1210.0	.1207	.1606	.1740	.9384	.8866-02	.6153-02	.9280	6.710	598.3
71	5.0000	10.000	1211.0	.1653	.2198	.2380	.9384	.1213-01	.8424-02	1.273	9.203	598.1
71	20.000	.96500	1224.0	.9610-01	.1239	.1299	.9421	.6619-02	.4900-02	.8180	5.961	582.2
71	20.000	.97500	1225.0	.1112	.1451	.1524	.9421	.7767-02	.5666-02	.9080	6.593	589.0
71	20.000	.98500	1226.0	.7930-01	.1034	.1086	.9421	.5535-02	.4043-02	.6500	4.752	588.4
71	35.000	10.000	1208.0	.1742	.2308	.2411	.9434	.1229-01	.8880-02	1.358	9.822	598.3
71	40.000	.96500	1228.0	.7150-01	.8960-01	.9200-01	.9449	.4688-02	.3645-02	.6760	5.003	563.8
71	40.000	.97500	1229.0	.1144	.1461	.1503	.9449	.7659-02	.5831-02	1.008	7.411	576.4
71	40.000	.99500	1231.0	.8640-01	.1117	.1151	.9449	.5865-02	.4404-02	.7290	5.309	583.6
70	45.000	.11500	1020.0	.1458	.1850	.2136	.9251	.1089-01	.7432-02	1.315	9.625	572.3
70	45.000	.14300	1021.0	.9280-01	.1164	.1332	.9251	.6788-02	.4732-02	.8770	6.444	564.0
70	45.000	.17100	1022.0	.9300-01	.1166	.1334	.9251	.6798-02	.4740-02	.8790	6.459	563.9
70	45.000	.20000	1023.0	.8160-01	.1015	.1155	.9251	.5888-02	.4160-02	.7960	5.866	558.0
70	45.000	.30000	1024.0	.1535	.1909	.2173	.9251	.1107-01	.7822-02	1.495	11.03	558.0
70	45.000	.55000	1027.0	.4860-01	.6120-01	.7020-01	.9251	.3578-02	.2479-02	.4530	3.304	566.5
70	45.000	.70000	1030.0	.1560	.1982	.2289	.9251	.1167-01	.7952-02	1.401	10.43	573.0
70	45.000	.80000	1031.0	.3670-01	.4610-01	.5280-01	.9251	.2690-02	.1871-02	.3450	2.578	564.8
70	45.000	.87500	1032.0	.5860-01	.7360-01	.8440-01	.9251	.4303-02	.2985-02	.5470	3.860	566.1
70	45.000	.92500	1033.0	.3840-01	.4760-01	.5410-01	.9251	.2756-02	.1958-02	.3800	2.686	555.3
71	45.000	.93200	1258.0	.5460-01	.6720-01	.7600-01	.9251	.3872-02	.2781-02	.5540	4.058	550.1
72	45.000	.93900	1264.0	.5760-01	.7130-01	.8100-01	.9251	.4130-02	.2936-02	.5690	4.150	555.1
70	50.000	.95300	1034.0	.5950-01	.7400-01	.7560-01	.9457	.3853-02	.3035-02	.5810	4.133	557.8
70	50.000	.96700	1035.0	.9880-01	.1260	.1291	.9457	.6579-02	.5037-02	.8740	6.204	575.6
70	50.000	.98000	1036.0	.1026	.1322	.1355	.9457	.6906-02	.5228-02	.8750	6.109	581.9
71	65.000	.43000-01	1200.0	.1957	.2694	.2798	.9450	.1426-01	.9976-02	1.367	9.813	612.2
71	65.000	.50000-01	1201.0	.1766	.2356	.2437	.9450	.1242-01	.9002-02	1.346	9.726	599.6
71	65.000	.57000-01	1202.0	.1472	.1944	.2008	.9450	.1024-01	.7502-02	1.157	8.374	595.0
71	65.000	.63000-01	1203.0	.1129	.1486	.1534	.9450	.7816-02	.5756-02	.8990	6.513	593.0
71	65.000	.90000-01	1204.0	.1324	.1732	.1787	.9450	.9105-02	.6749-02	1.074	7.793	590.1
71	65.000	.10000+00	1205.0	.2224	.2950	.3049	.9450	.1554-01	.1134-01	1.725	12.47	597.1
72	76.000	.12000	1290.0	.9280-01	.1171	.1347	.9252	.6867-02	.4730-02	.8520	6.087	569.0
72	76.000	.12700	1291.0	.7610-01	.9670-01	.1117	.9252	.5695-02	.3882-02	.6840	4.921	573.0
72	76.000	.13400	1292.0	.1230	.1602	.1885	.9252	.9612-02	.6271-02	1.012	7.182	587.8
72	76.000	.17300	1293.0	.5900-01	.7370-01	.8400-01	.9252	.4285-02	.3007-02	.5650	4.136	561.1
72	76.000	.18000	1294.0	.6630-01	.8230-01	.9360-01	.9252	.4772-02	.3378-02	.6490	4.707	557.1
72	76.000	.18600	1295.0	.6680-01	.8270-01	.9370-01	.9252	.4779-02	.3406-02	.6650	4.880	553.9
72	76.000	.19300	1296.0	.6590-01	.8130-01	.9200-01	.9252	.4692-02	.3362-02	.6650	4.905	551.3
72	76.000	.20000	1297.0	.5970-01	.7350-01	.8300-01	.9252	.4231-02	.3045-02	.6090	4.482	549.1
70	90.000	.20000-02	1039.0	.3052	.4593	.3344	.9870	.1704-01	.1555-01	1.736	12.11	637.6
70	90.000	.10000+00	1042.0	.7920-01	.1074	.1129	.9431	.5753-02	.4036-02	.5760	4.148	606.4
70	90.000	.13400	1045.0	.1259	.1944	.2685	.9246	.1368-01	.6418-02	.6830	4.829	642.8

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF

(RVZL14)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
70	90.000	.17300	1046.0	.2640-01	.3280-01	.3740-01	.9246	.1906-02	.1344-02	.2580	1.901	557.5
70	90.000	.18000	1047.0	.5070-01	.6220-01	.7040-01	.9246	.3586-02	.2582-02	.5210	3.859	547.6
70	90.000	.18600	1048.0	.2580-01	.3180-01	.3620-01	.9246	.1843-02	.1313-02	.2580	1.910	552.6
70	90.000	.19300	1049.0	.2610-01	.3210-01	.3640-01	.9246	.1856-02	.1331-02	.2660	1.968	549.6
70	90.000	.20000	1050.0	.2010-01	.2470-01	.2800-01	.9246	.1425-02	.1025-02	.2060	1.527	548.0
70	90.000	.25000	1051.0	.3080-01	.3770-01	.4260-01	.9246	.2171-02	.1567-02	.3180	2.361	546.1
70	90.000	.30000	1052.0	.5930-01	.7260-01	.8200-01	.9246	.4177-02	.3022-02	.6180	4.584	544.9
70	90.000	.50000	1054.0	.6250-01	.7740-01	.8800-01	.9246	.4485-02	.3186-02	.6210	4.515	554.2
70	90.000	.60000	1055.0	.4520-01	.5590-01	.6350-01	.9246	.3235-02	.2303-02	.4510	3.314	553.2
70	90.000	.75000	1057.0	.1193	.1659	.2070	.9246	.1055-01	.6078-02	.8100	6.111	615.9
70	90.000	.80000	1058.0	.3810-01	.4750-01	.5430-01	.9246	.2767-02	.1943-02	.3690	2.717	559.4
70	90.000	.87500	1059.0	.5540-01	.7510-01	.9170-01	.9246	.4671-02	.2824-02	.4030	2.783	606.4
70	90.000	.92500	1060.0	.2620-01	.3230-01	.3670-01	.9246	.1870-02	.1337-02	.2650	1.887	550.9
70	90.000	.95300	1061.0	.2800-01	.3460-01	.3550-01	.9441	.1811-02	.1426-02	.2810	2.010	552.3
70	90.000	.96700	1062.0	.3650-01	.4550-01	.4680-01	.9441	.2387-02	.1861-02	.3540	2.541	559.1
70	90.000	.98000	1063.0	.3870-01	.4840-01	.4980-01	.9441	.2540-02	.1970-02	.3680	2.604	562.4
70	90.000	.99400	1064.0	.4260-01	.5360-01	.5530-01	.9441	.2819-02	.2173-02	.3980	2.816	566.3
70	135.00	.14300	1066.0	.7870-01	.9920-01	.1160	.9223	.5911-02	.4012-02	.7270	5.335	568.0
70	135.00	.20000	1068.0	.1000-01	.1230-01	.1410-01	.9223	.7185-03	.5116-03	.1030	.7670	547.0
70	135.00	.30000	1069.0	.1380-01	.1680-01	.1910-01	.9223	.9727-03	.7016-03	.1470	1.091	540.3
70	135.00	.50000	1070.0	.5160-01	.6340-01	.7260-01	.9223	.3700-02	.2631-02	.5300	3.864	547.7
70	135.00	.60000	1071.0	.4640-01	.5710-01	.6540-01	.9223	.3333-02	.2367-02	.4750	3.523	548.3
70	135.00	.70000	1072.0	.3960-01	.4950-01	.5750-01	.9223	.2929-02	.2017-02	.3770	2.821	562.3
71	135.00	.72400	1237.0	.4070-01	.5100-01	.5940-01	.9223	.3026-02	.2076-02	.3850	2.941	563.7
71	135.00	.74000	1243.0	.8230-01	.1050	.1239	.9223	.6316-02	.4197-02	.7280	5.565	575.7
71	135.00	.75000	1246.0	.1292	.1688	.2032	.9223	.1036-01	.6586-02	1.053	7.964	589.3
71	135.00	.77100	1252.0	.7160-01	.8930-01	.1033	.9223	.5267-02	.3651-02	.6930	5.266	559.4
70	135.00	.80000	1073.0	.3430-01	.4280-01	.4970-01	.9223	.2531-02	.1749-02	.3300	2.469	560.7
71	135.00	.93200	1259.0	.4720-01	.5760-01	.6560-01	.9223	.3341-02	.2406-02	.5010	3.687	541.1
72	135.00	.93900	1265.0	.5300-01	.6490-01	.7410-01	.9223	.3779-02	.2705-02	.5540	4.059	544.3
70	135.00	.95300	1074.0	.5060-01	.6220-01	.6660-01	.9357	.3395-02	.2580-02	.5180	3.702	548.5
70	135.00	.98000	1076.0	.6620-01	.8320-01	.8990-01	.9357	.4574-02	.3373-02	.6190	4.371	565.7
72	138.00	.95300	1266.0	.6020-01	.7380-01	.7920-01	.9350	.4039-02	.3070-02	.6220	4.425	546.3
72	138.00	.96700	1268.0	.9380-01	.1179	.1276	.9350	.6508-02	.4785-02	.8790	6.171	565.4
72	138.00	.98000	1270.0	.9900-01	.1248	.1353	.9350	.6898-02	.5047-02	.9150	6.377	567.8
72	138.00	.99400	1272.0	.7800-01	.9810-01	.1063	.9350	.5420-02	.3979-02	.7280	5.109	566.1
72	162.00	.95300	1267.0	.6990-01	.8690-01	.9600-01	.9305	.4895-02	.3563-02	.6820	4.966	557.6
72	162.00	.96700	1269.0	.9070-01	.1152	.1287	.9305	.6563-02	.4625-02	.8160	5.911	572.7
72	162.00	.98000	1271.0	.9580-01	.1222	.1369	.9305	.6980-02	.4887-02	.8490	6.124	575.4
70	180.00	.20000	1078.0	.1960-01	.2390-01	.2730-01	.9220	.1392-02	.9987-03	.2060	1.535	542.5
70	180.00	.40000	1079.0	.4400-01	.5390-01	.6170-01	.9220	.3142-02	.2241-02	.4560	3.268	545.5
70	180.00	.60000	1080.0	.4780-01	.5900-01	.6800-01	.9220	.3463-02	.2434-02	.4790	3.538	552.6
70	180.00	.70000	1081.0	.3290-01	.4110-01	.4770-01	.9220	.2432-02	.1675-02	.3140	2.378	561.5

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF (RVZL14)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
71	180.00	.74000	1238.0	.7670-01	.9700-01	.1140	.9220	.5808-02	.3907-02	.6970	5.268	570.7
70	180.00	.75000	1082.0	.3910-01	.4980-01	.5870-01	.9220	.2993-02	.1993-02	.3490	2.732	574.3
71	180.00	.77100	1247.0	.3910-01	.4860-01	.5620-01	.9220	.2865-02	.1991-02	.3810	2.993	557.6
70	180.00	.80000	1083.0	.3750-01	.4760-01	.5610-01	.9220	.2858-02	.1912-02	.3370	2.512	572.7
71	180.00	.93200	1253.0	.5610-01	.6970-01	.8060-01	.9220	.4110-02	.2860-02	.5500	3.976	557.0
71	180.00	.93900	1260.0	.6470-01	.8080-01	.9380-01	.9220	.4781-02	.3299-02	.6220	4.461	560.7
70	180.00	.95300	1084.0	.1160-01	.1240-01	.1290-01	.9278	.6550-03	.5916-03	.3310	2.876	190.1
70	180.00	.96700	1085.0	.6940-01	.8850-01	.1007	.9278	.5134-02	.3538-02	.6160	4.343	575.2
70	180.00	.98000	1086.0	.6560-01	.8360-01	.9510-01	.9278	.4848-02	.3342-02	.5820	4.119	575.1
70	180.00	.99400	1087.0	.6400-01	.8200-01	.9380-01	.9278	.4778-02	.3262-02	.5560	3.902	578.7
72	198.00	.95300	1276.0	.8380-01	.1047	.1190	.9259	.6070-02	.4272-02	.8000	5.927	561.8
72	198.00	.96700	1280.0	.7490-01	.9570-01	.1104	.9259	.5629-02	.3819-02	.6590	4.780	576.6
72	198.00	.98000	1284.0	.6590-01	.8410-01	.9700-01	.9259	.4947-02	.3363-02	.5820	4.215	575.9
70	225.00	.11500	1088.0	.6410-01	.7990-01	.9270-01	.9220	.4726-02	.3268-02	.6190	4.560	559.8
70	225.00	.17700	1090.0	.1370-01	.1660-01	.1900-01	.9220	.9668-03	.6958-03	.1450	1.079	540.8
70	225.00	.60000	1091.0	.5190-01	.6450-01	.7470-01	.9220	.3806-02	.2644-02	.5060	3.733	557.8
70	225.00	.70000	1092.0	.4260-01	.5320-01	.6180-01	.9220	.3151-02	.2173-02	.4090	3.044	560.9
71	225.00	.72400	1233.0	.4960-01	.6180-01	.7150-01	.9220	.3647-02	.2531-02	.4830	3.698	558.3
71	225.00	.74000	1239.0	.4280-01	.5320-01	.6160-01	.9220	.3137-02	.2182-02	.4190	3.220	557.2
71	225.00	.75000	1244.0	.5730-01	.7260-01	.8530-01	.9220	.4348-02	.2918-02	.5190	3.985	571.5
71	225.00	.77100	1248.0	.3360-01	.4190-01	.4850-01	.9220	.2474-02	.1713-02	.3260	2.508	559.2
70	225.00	.80000	1093.0	.4670-01	.5830-01	.6780-01	.9220	.3454-02	.2381-02	.4480	3.296	561.2
71	225.00	.93200	1254.0	.4930-01	.6170-01	.7170-01	.9220	.3656-02	.2514-02	.4700	3.359	562.2
71	225.00	.93900	1261.0	.5820-01	.7320-01	.8550-01	.9220	.4359-02	.2966-02	.5430	3.844	566.3
72	238.00	.95300	1277.0	.7870-01	.9850-01	.1132	.9243	.5773-02	.4011-02	.7450	5.460	563.4
72	238.00	.96700	1281.0	.6420-01	.8220-01	.9600-01	.9243	.4895-02	.3273-02	.5600	4.144	578.0
72	238.00	.98000	1285.0	.6490-01	.8290-01	.9660-01	.9243	.4927-02	.3311-02	.5720	4.238	576.3
72	238.00	.99400	1289.0	.1700-02	.2100-02	.2300-02	.9243	.1195-03	.8748-04	.1900-01	.1370	537.4
70	256.00	.11500	1094.0	.6810-01	.8470-01	.9810-01	.9220	.4998-02	.3470-02	.6630	4.891	558.1
70	256.00	.12800	1095.0	.3390-01	.4140-01	.4720-01	.9220	.2406-02	.1727-02	.3580	2.662	541.9
70	256.00	.14600	1096.0	.1430-01	.1740-01	.1990-01	.9220	.1014-02	.7284-03	.1510	1.123	541.8
71	256.00	.20000	1097.0	.1230-01	.1480-01	.1670-01	.9220	.8515-03	.6284-03	.1400	1.050	526.2
71	256.00	.40000	1098.0	.1830-01	.2240-01	.2560-01	.9220	.1306-02	.9336-03	.1910	1.354	544.1
71	256.00	.80000	1100.0	.3190-01	.3950-01	.4560-01	.9220	.2323-02	.1626-02	.3170	2.339	554.4
71	270.00	.50000-01	1102.0	.1125	.1457	.1713	.9246	.8733-02	.5734-02	.9430	6.865	584.7
71	270.00	.10000+00	1103.0	.9470-01	.1207	.1403	.9246	.7148-02	.4825-02	.8390	6.130	575.4
71	270.00	.11500	1104.0	.5830-01	.7220-01	.8320-01	.9220	.4243-02	.2972-02	.5800	4.286	554.0
71	270.00	.14600	1105.0	.4980-01	.6070-01	.6910-01	.9220	.3520-02	.2541-02	.5330	3.971	539.2
71	270.00	.72400	1234.0	.5750-01	.6970-01	.7920-01	.9220	.4036-02	.2929-02	.6240	4.670	536.1
71	270.00	.74000	1240.0	.7160-01	.8730-01	.9950-01	.9220	.5071-02	.3652-02	.7620	5.708	540.5
71	270.00	.77100	1249.0	.4170-01	.5110-01	.5850-01	.9220	.2980-02	.2127-02	.4350	3.384	544.9
71	270.00	.93200	1255.0	.7330-01	.9020-01	.1035	.9220	.5275-02	.3738-02	.7490	5.425	548.7
71	270.00	.93900	1262.0	.7560-01	.9380-01	.1084	.9220	.5525-02	.3851-02	.7420	5.425	556.4

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
71	270.00	.95300	1110.0	.6760-01	.8400-01	.9560-01	.9250	.4873-02	.3447-02	.6620	4.694	557.2
71	270.00	.96700	1111.0	.4200-01	.5340-01	.6180-01	.9250	.3148-02	.2142-02	.3770	2.669	573.3
71	270.00	.98000	1112.0	.4210-01	.5350-01	.6180-01	.9250	.3149-02	.2146-02	.3790	2.664	572.8
71	270.00	.99400	1113.0	.5550-01	.7050-01	.8140-01	.9250	.4151-02	.2831-02	.5000	3.545	572.5
71	284.00	.11500	1114.0	.6550-01	.8130-01	.9400-01	.9220	.4792-02	.3338-02	.6430	4.742	556.7
71	284.00	.12800	1115.0	.2100-01	.2550-01	.2910-01	.9220	.1481-02	.1068-02	.2240	1.666	539.6
71	284.00	.14600	1116.0	.1410-01	.1720-01	.1950-01	.9220	.9962-03	.7196-03	.1510	1.128	538.8
71	284.00	.20000	1117.0	.7600-02	.9200-02	.1040-01	.9220	.5321-03	.3857-03	.8200-01	.6110	536.7
71	284.00	.40000	1118.0	.6800-02	.8200-02	.9400-02	.9220	.4770-03	.3445-03	.7200-01	.5160	538.8
71	284.00	.60000	1119.0	.6400-02	.7800-02	.8900-02	.9220	.4559-03	.3242-03	.6600-01	.4830	546.9
71	284.00	.80000	1120.0	.1460-01	.1810-01	.2090-01	.9220	.1067-02	.7435-03	.1430	1.075	556.5
71	284.00	.87500	1121.0	.1350-01	.1720-01	.2020-01	.9220	.1030-02	.6891-03	.1220	.8560	572.7
72	302.00	.98000	1282.0	.3920-01	.5030-01	.5750-01	.9277	.2932-02	.1999-02	.3400	2.493	578.8
71	315.00	.92500	1122.0	.9020-01	.1128	.1312	.9220	.6688-02	.4599-02	.8600	6.331	562.1
71	315.00	.93900	1124.0	.1660-01	.2030-01	.2310-01	.9220	.1179-02	.8452-03	.1740	1.298	542.8
71	315.00	.95300	1125.0	.2280-01	.2790-01	.3190-01	.9220	.1626-02	.1162-02	.2380	1.766	544.5
71	315.00	.96700	1126.0	.2250-01	.2740-01	.3120-01	.9220	.1591-02	.1144-02	.2380	1.773	540.9
71	315.00	.98000	1127.0	.2210-01	.2730-01	.3140-01	.9220	.1601-02	.1127-02	.2230	1.620	551.7
71	315.00	.99400	1128.0	.1460-01	.1810-01	.2080-01	.9220	.1062-02	.7463-03	.1470	1.077	552.7
71	315.00	.70000	1129.0	.1370-01	.1710-01	.1970-01	.9220	.1005-02	.7003-03	.1350	1.003	556.5
71	315.00	.72400	1235.0	.2710-01	.3370-01	.3920-01	.9220	.1995-02	.1380-02	.2620	1.967	559.7
71	315.00	.74000	1241.0	.4020-01	.5050-01	.5900-01	.9220	.3009-02	.2048-02	.3740	2.834	566.4
71	315.00	.77100	1250.0	.1520-01	.1860-01	.2130-01	.9220	.1088-02	.7726-03	.1560	1.233	547.5
71	315.00	.80000	1130.0	.3470-01	.4350-01	.5080-01	.9220	.2587-02	.1770-02	.3280	2.449	564.2
71	315.00	.87500	1131.0	.2410-01	.3100-01	.3680-01	.9220	.1878-02	.1230-02	.2080	1.457	579.8
71	315.00	1265.0	1132.0	.3960-01	.4970-01	.5810-01	.9220	.2961-02	.2018-02	.3700	2.615	565.7
71	315.00	1074.0	1256.0	.5010-01	.6310-01	.7390-01	.9220	.3768-02	.2554-02	.4630	3.267	567.9
72	315.00	1075.0	1263.0	.6060-01	.7670-01	.9010-01	.9220	.4596-02	.3092-02	.5520	3.953	570.6
71	315.00	1076.0	1133.0	.1127	.1413	.1577	.9295	.8037-02	.5745-02	1.064	7.495	564.1
71	315.00	1077.0	1134.0	.4030-01	.5170-01	.5850-01	.9295	.2981-02	.2055-02	.3490	2.475	579.2
71	315.00	1057.0	1135.0	.4260-01	.5460-01	.6180-01	.9295	.3149-02	.2170-02	.3680	2.585	579.4
71	315.00	1058.0	1136.0	.4260-01	.5490-01	.6220-01	.9295	.3170-02	.2171-02	.3640	2.525	581.6
71	330.00	.72400	1236.0	.1262	.1602	.1887	.9220	.9618-02	.6434-02	1.136	8.691	572.7
71	335.00	.43000-01	1212.0	.1461	.1946	.2204	.9324	.1123-01	.7448-02	1.121	8.098	598.8
71	335.00	.50000-01	1213.0	.1266	.1679	.1898	.9324	.9675-02	.6450-02	.9810	7.092	597.2
71	335.00	.57000-01	1214.0	.1268	.1669	.1880	.9324	.9580-02	.6462-02	1.006	7.291	593.5
71	335.00	.63000-01	1215.0	.1071	.1404	.1577	.9324	.8038-02	.5461-02	.8630	6.262	591.1
71	335.00	.90000-01	1216.0	.1241	.1632	.1837	.9324	.9361-02	.6326-02	.9890	7.167	592.9
71	335.00	.10000+00	1217.0	.1494	.1961	.2205	.9324	.1124-01	.7614-02	1.196	8.674	592.1
72	342.00	.95300	1275.0	.7200-01	.9160-01	.1000+00	.9345	.5101-02	.3671-02	.6430	4.421	574.0
72	342.00	.96700	1279.0	.4800-01	.6260-01	.6910-01	.9345	.3525-02	.2446-02	.3920	2.738	588.8
72	342.00	.98000	1283.0	.6840-01	.8920-01	.9840-01	.9345	.5020-02	.3489-02	.5610	3.847	588.2
72	342.00	.99400	1287.0	.6190-01	.8070-01	.8910-01	.9345	.4541-02	.3157-02	.5080	3.484	588.1

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF (RVZL14)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
70	355.00	.95300	1016.0	.7160-01	.9150-01	.9860-01	.9372	.5023-02	.3649-02	.6280	4.423	577.2
70	355.00	.96700	1017.0	.7170-01	.9430-01	.1027	.9372	.5233-02	.3652-02	.5690	4.001	593.5
70	355.00	.98000	1018.0	.1005	.1315	.1428	.9372	.7277-02	.5122-02	.8140	5.699	590.3
70	355.00	.99400	1019.0	.8920-01	.1165	.1264	.9372	.6440-02	.4544-02	.7270	5.040	589.3

LEFT SRB

PARAMETRIC DATA

ALPHA = .0000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
61	-.2000-01	-9.100	4.020	72.20	749.0	177.0	.4630	5.236	2621.	.2194-03	.1425-06	4.034
62	-.2000-01	-9.100	4.020	72.30	749.0	177.1	.4640	5.246	2621.	.2197-03	.1426-06	4.040
63	-.3000-01	-9.100	4.020	72.20	749.0	177.0	.4630	5.236	2621.	.2194-03	.1425-06	4.035

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
61	.5096-01	.1145-01
62	.5101-01	.1144-01
63	.5096-01	.1145-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
61	.00000	.11500	1000.0	.1552	.2009	.2407	.9220	.1227-01	.7909-02	1.301	9.466	584.7
61	.00000	.20000	1001.0	.7730-01	.9640-01	.1118	.9220	.5697-02	.3940-02	.7470	5.501	559.7
61	.00000	.25000	1003.0	.7940-01	.9880-01	.1145	.9220	.5836-02	.4045-02	.7710	5.681	558.7
61	.00000	.30000	1004.0	.8130-01	.1011	.1170	.9220	.5963-02	.4144-02	.7940	5.853	557.7
61	.00000	.50000	1006.0	.7750-01	.9660-01	.1120	.9220	.5708-02	.3950-02	.7500	5.450	559.5
61	.00000	.55000	1007.0	.8570-01	.1075	.1255	.9220	.6394-02	.4367-02	.8050	5.837	564.9
61	.00000	.60000	1008.0	.9360-01	.1181	.1383	.9220	.7048-02	.4772-02	.8630	6.335	568.3
61	.00000	.65000	1009.0	.9260-01	.1176	.1385	.9220	.7058-02	.4722-02	.8340	6.061	572.7
61	.00000	.70000	1010.0	.7740-01	.9880-01	.1170	.9220	.5963-02	.3943-02	.6800	5.139	576.7
62	.00000	.72400	1232.0	.5350-01	.6770-01	.7950-01	.9220	.4056-02	.2729-02	.4870	3.682	570.8
62	.00000	.74000	1242.0	.1372	.1865	.2336	.9220	.1192-01	.6997-02	.9910	7.501	607.8
61	.00000	.75000	1011.0	.9140-01	.1239	.1547	.9220	.7886-02	.4659-02	.6650	5.132	606.4
62	.00000	.77100	1251.0	.9690-01	.1244	.1479	.9220	.7543-02	.4942-02	.8380	6.499	579.9
61	.00000	.80000	1012.0	.1073	.1426	.1747	.9220	.8903-02	.5470-02	.8290	6.200	597.7
61	.00000	.87500	1013.0	.1498	.2026	.2524	.9220	.1286-01	.7636-02	1.098	7.580	605.4
62	.00000	.93200	1257.0	.1087	.1450	.1784	.9220	.9101-02	.5545-02	.8290	5.724	599.8
62	4.3800	.96500	1220.0	.1694	.2431	.2889	.9317	.1474-01	.8644-02	1.069	7.755	625.7
62	4.3800	.97500	1221.0	.1598	.2350	.2838	.9317	.1448-01	.8150-02	.9540	6.872	632.4

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF (RVZL15)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
62	4.3800	.98500	1222.0	.1607	.2264	.2661	.9317	.1358-01	.8197-02	1.058	7.594	620.3
62	4.3800	.99500	1223.0	.1465	.2025	.2354	.9317	.1201-01	.7474-02	1.013	7.266	613.9
62	5.0000	.50000-01	1209.0	.9700-01	.1187	.1298	.9310	.6620-02	.4947-02	1.012	7.565	544.8
62	5.0000	.90000-01	1210.0	.2126	.2801	.3187	.9310	.1626-01	.1084-01	1.684	12.20	594.1
62	5.0000	10.000	1211.0	.2374	.3135	.3571	.9310	.1822-01	.1211-01	1.869	13.53	595.1
62	20.000	.96500	1224.0	.1645	.2359	.2873	.9294	.1466-01	.8392-02	1.039	7.409	625.6
62	20.000	.97500	1225.0	.1618	.2320	.2824	.9294	.1441-01	.8254-02	1.023	7.294	625.5
62	20.000	.98500	1226.0	.1272	.1808	.2188	.9294	.1116-01	.6489-02	.8200	5.895	623.1
62	35.000	10.000	1208.0	.2029	.2643	.3069	.9271	.1565-01	.1035-01	1.670	12.13	588.1
62	40.000	96500	1228.0	.8360-01	.1083	.1253	.9271	.6391-02	.4264-02	.7000	5.123	585.4
62	40.000	.97500	1229.0	.1059	.1383	.1608	.9271	.8204-02	.5402-02	.8640	6.313	589.5
62	40.000	.99500	1231.0	.8890-01	.1170	.1368	.9271	.6980-02	.4535-02	.7070	5.121	593.6
61	45.000	.14300	1021.0	.9480-01	.1192	.1394	.9220	.7102-02	.4832-02	.8830	6.485	566.4
61	45.000	.17100	1022.0	.8630-01	.1085	.1268	.9220	.6461-02	.4400-02	.8060	5.922	566.0
61	45.000	.55000	1027.0	.1161	.1487	.1764	.9220	.8990-02	.5916-02	1.011	7.330	578.3
61	45.000	.70000	1030.0	.8840-01	.1167	.1422	.9220	.7247-02	.4506-02	.6960	5.125	594.7
61	45.000	.80000	1031.0	.9630-01	.1261	.1525	.9220	.7773-02	.4906-02	.7770	5.734	590.8
61	45.000	.87500	1032.0	.7720-01	.9880-01	.1172	.9220	.5974-02	.3935-02	.6740	4.730	578.0
61	45.000	.92500	1033.0	.7290-01	.9090-01	.1054	.9220	.5370-02	.3718-02	.7060	4.986	559.3
62	45.000	.93200	1258.0	.7890-01	.9930-01	.1161	.9220	.5923-02	.4027-02	.7360	5.346	566.8
63	45.000	.93900	1264.0	.9020-01	.1157	.1375	.9220	.7007-02	.4597-02	.7810	5.622	579.2
61	50.000	.95300	1034.0	.6580-01	.8200-01	.9280-01	.9263	.4729-02	.3352-02	.6360	4.518	559.6
61	50.000	.96700	1035.0	.7620-01	.9670-01	.1108	.9263	.5648-02	.3885-02	.6870	4.885	572.3
61	50.000	.98000	1036.0	.1034	.1326	.1530	.9263	.7800-02	.5267-02	.8950	6.262	579.2
62	65.000	.43000-01	1200.0	.2901	.3960	.4841	.9251	.2469-01	.1480-01	2.074	14.91	609.3
62	65.000	.50000-01	1201.0	.2419	.3203	.3821	.9251	.1949-01	.1234-01	1.890	13.67	596.3
62	65.000	.57000-01	1202.0	.2144	.2805	.3315	.9251	.1691-01	.1094-01	1.738	12.61	590.5
62	65.000	.63000-01	1203.0	.1935	.2519	.2964	.9251	.1512-01	.9873-02	1.598	11.61	587.6
62	65.000	.90000-01	1204.0	.1330	.1727	.2029	.9251	.1035-01	.6786-02	1.106	8.045	586.4
62	65.000	.10000+00	1205.0	.1786	.2323	.2734	.9251	.1395-01	.9109-02	1.475	10.72	587.5
63	76.000	.12000	1290.0	.1523	.1986	.2394	.9220	.1220-01	.7763-02	1.247	8.823	588.4
63	76.000	.12700	1291.0	.1538	.2023	.2456	.9220	.1251-01	.7840-02	1.226	8.743	592.7
63	76.000	.13400	1292.0	.1636	.2218	.2771	.9220	.1412-01	.8335-02	1.189	8.363	606.5
63	76.000	.17300	1293.0	.8170-01	.1048	.1245	.9220	.6346-02	.4163-02	.7070	5.124	579.3
63	76.000	.18000	1294.0	.7440-01	.9480-01	.1120	.9220	.5709-02	.3794-02	.6610	4.751	575.0
63	76.000	.18600	1295.0	.6390-01	.8090-01	.9510-01	.9220	.4846-02	.3258-02	.5810	4.229	570.8
63	76.000	.19300	1296.0	.5500-01	.6930-01	.8100-01	.9220	.4128-02	.2804-02	.5110	3.736	567.0
63	76.000	.20000	1297.0	.4840-01	.6070-01	.7070-01	.9220	.3605-02	.2468-02	.4570	3.337	563.9
61	90.000	.20000-02	1039.0	.4569	.6615	.6214	.9572	.3167-01	.2329-01	2.821	19.77	628.1
61	90.000	.10000+00	1042.0	.3482	.4603	.5503	.9246	.2805-01	.1774-01	2.730	19.76	595.4
61	90.000	.13400	1045.0	.3075	.5253	.8705	.9220	.4436-01	.1567-01	1.416	9.939	658.9
61	90.000	.17300	1046.0	.9880-01	.1261	.1493	.9220	.7607-02	.5035-02	.8700	6.358	576.4
61	90.000	.18000	1047.0	.8710-01	.1085	.1258	.9220	.6413-02	.4440-02	.8430	6.214	559.3

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF

(RVZL15)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
61	90.000	.18600	1048.0	.7380-01	.9270-01	.1082	.9220	.5515-02	.3761-02	.6910	5.074	565.5
61	90.000	.19300	1049.0	.6450-01	.8030-01	.9310-01	.9220	.4742-02	.3287-02	.6260	4.614	558.8
61	90.000	.20000	1050.0	.5280-01	.6530-01	.7530-01	.9220	.3836-02	.2691-02	.5270	3.894	553.4
61	90.000	.25000	1051.0	.2920-01	.3610-01	.4150-01	.9220	.2117-02	.1489-02	.2930	2.167	552.4
61	90.000	.30000	1052.0	.2840-01	.3500-01	.4020-01	.9220	.2050-02	.1447-02	.2870	2.128	550.6
61	90.000	.50000	1054.0	.6710-01	.8400-01	.9780-01	.9220	.4982-02	.3421-02	.6380	4.617	562.7
61	90.000	.60000	1055.0	.6900-01	.8670-01	.1012	.9220	.5158-02	.3516-02	.6450	4.710	565.6
61	90.000	.70000	1056.0	.4600-01	.5870-01	.6930-01	.9220	.3534-02	.2345-02	.4080	2.960	575.4
61	90.000	.75000	1057.0	.1777	.2589	.3477	.9220	.1772-01	.9057-02	1.083	8.112	629.7
61	90.000	.80000	1058.0	.2440-01	.3010-01	.3470-01	.9220	.1766-02	.1243-02	.2450	1.814	551.9
61	90.000	.92500	1060.0	.4010-01	.4920-01	.5650-01	.9220	.2877-02	.2041-02	.4110	2.926	548.1
61	90.000	.95300	1061.0	.4310-01	.5300-01	.6000-01	.9250	.3058-02	.2194-02	.4370	3.129	550.2
61	90.000	.96700	1062.0	.4730-01	.5880-01	.6680-01	.9250	.3406-02	.2412-02	.4640	3.338	556.7
61	90.000	.98000	1063.0	.5300-01	.6610-01	.7540-01	.9250	.3843-02	.2700-02	.5100	3.615	560.2
61	90.000	.99400	1064.0	.5110-01	.6410-01	.7340-01	.9250	.3743-02	.2605-02	.4820	3.417	564.2
61	135.00	.14300	1066.0	.1238	.1572	.1853	.9220	.9443-02	.6307-02	1.110	8.124	573.2
61	135.00	.20000	1068.0	.6660-01	.8250-01	.9520-01	.9220	.4852-02	.3392-02	.6590	4.866	555.0
61	135.00	.30000	1069.0	.4760-01	.5860-01	.6740-01	.9220	.3434-02	.2426-02	.4830	3.575	550.1
61	135.00	.50000	1070.0	.7650-01	.9490-01	.1097	.9220	.5592-02	.3899-02	.7520	5.463	556.2
61	135.00	.60000	1071.0	.5660-01	.6990-01	.8050-01	.9220	.4104-02	.2885-02	.5670	4.196	552.5
61	135.00	.70000	1072.0	.3580-01	.4480-01	.5230-01	.9220	.2665-02	.1822-02	.3370	2.517	564.4
62	135.00	.72400	1237.0	.8620-01	.1105	.1311	.9220	.6688-02	.4398-02	.7510	5.690	578.7
62	135.00	.74000	1243.0	.1179	.1539	.1857	.9220	.9473-02	.6013-02	.9620	7.303	589.4
62	135.00	.75000	1246.0	.1178	.1554	.1892	.9220	.9652-02	.6007-02	.9300	7.013	594.6
62	135.00	.77100	1252.0	.1008	.1269	.1486	.9220	.7579-02	.5140-02	.9330	7.061	567.8
61	135.00	.80000	1073.0	.5080-01	.6290-01	.7250-01	.9220	.3694-02	.2591-02	.5070	3.810	553.6
62	135.00	.93200	1259.0	.2170-01	.2680-01	.3080-01	.9220	.1571-02	.1107-02	.2190	1.603	551.7
63	135.00	.93900	1265.0	.1460-01	.1820-01	.2130-01	.9220	.1083-02	.7427-03	.1380	1.002	563.2
61	135.00	.95300	1074.0	.2410-01	.2960-01	.3300-01	.9267	.1684-02	.1230-02	.2500	1.790	545.8
61	135.00	.98000	1076.0	.4470-01	.5550-01	.6260-01	.9267	.3189-02	.2277-02	.4370	3.102	557.1
63	138.00	.95300	1266.0	.2180-01	.2730-01	.3090-01	.9269	.1575-02	.1113-02	.2080	1.468	562.2
63	138.00	.96700	1268.0	.4090-01	.5190-01	.5930-01	.9269	.3020-02	.2082-02	.3670	2.566	572.8
63	138.00	.98000	1270.0	.4280-01	.5440-01	.6220-01	.9269	.3170-02	.2180-02	.3820	2.657	573.7
63	138.00	.99400	1272.0	.3330-01	.4220-01	.4820-01	.9269	.2456-02	.1699-02	.3020	2.114	571.3
63	162.00	.95300	1267.0	.2180-01	.2730-01	.3050-01	.9296	.1557-02	.1109-02	.2030	1.472	565.9
63	162.00	.96700	1269.0	.4610-01	.5860-01	.6580-01	.9296	.3353-02	.2352-02	.4150	3.009	572.5
63	162.00	.98000	1271.0	.5380-01	.6930-01	.7860-01	.9296	.4004-02	.2739-02	.4570	3.289	582.1
61	180.00	.20000	1078.0	.6940-01	.8570-01	.9870-01	.9220	.5032-02	.3537-02	.6960	5.143	552.6
61	180.00	.40000	1079.0	.5930-01	.7320-01	.8420-01	.9220	.4292-02	.3020-02	.5950	4.245	552.1
61	180.00	.60000	1080.0	.6230-01	.7710-01	.8890-01	.9220	.4531-02	.3175-02	.6200	4.584	553.9
61	180.00	.70000	1081.0	.5120-01	.6410-01	.7460-01	.9220	.3801-02	.2610-02	.4870	3.680	562.7
62	180.00	.74000	1238.0	.1001	.1297	.1553	.9220	.7922-02	.5108-02	.8400	6.304	584.9
61	180.00	.75000	1082.0	.8240-01	.1052	.1244	.9220	.6341-02	.4199-02	.7260	5.687	576.2

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF

(RVZL15)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
62	180.00	.77100	1247.0	.6450-01	.8150-01	.9550-01	.9220	.4873-02	.3291-02	.5920	4.621	569.4
61	180.00	.80000	1083.0	.8510-01	.1084	.1280	.9220	.6521-02	.4339-02	.7580	5.637	574.5
62	180.00	.93200	1253.0	.4130-01	.5120-01	.5910-01	.9220	.3017-02	.2109-02	.4100	2.965	555.2
62	180.00	.93900	1260.0	.4220-01	.5240-01	.6050-01	.9220	.3087-02	.2152-02	.4150	2.983	556.5
61	180.00	.96700	1085.0	.4150-01	.5230-01	.5750-01	.9324	.2932-02	.2117-02	.3860	2.731	567.0
61	180.00	.98000	1086.0	.5000-01	.6340-01	.7010-01	.9324	.3571-02	.2548-02	.4500	3.190	572.5
61	180.00	.99400	1087.0	.4230-01	.5420-01	.6020-01	.9324	.3066-02	.2155-02	.3670	2.576	578.8
63	198.00	.95300	1276.0	.8940-01	.1149	.1252	.9356	.6380-02	.4558-02	.7700	5.650	580.3
63	198.00	.96700	1280.0	.4280-01	.5710-01	.6320-01	.9356	.3220-02	.2179-02	.3250	2.332	599.9
63	198.00	.98000	1284.0	.3560-01	.4770-01	.5280-01	.9356	.2692-02	.1812-02	.2670	1.911	601.5
61	225.00	.11500	1088.0	.1503	.1943	.2303	.9233	.1173-01	.7658-02	1.266	9.215	583.9
61	225.00	.17700	1090.0	.8710-01	.1090	.1260	.9233	.6422-02	.4436-02	.8240	6.061	563.4
61	225.00	.60000	1091.0	.6190-01	.7760-01	.8980-01	.9233	.4577-02	.3154-02	.5820	4.281	564.5
61	225.00	.70000	1092.0	.6060-01	.7680-01	.8950-01	.9233	.4563-02	.3088-02	.5480	4.057	571.6
62	225.00	.72400	1233.0	.8350-01	.1078	.1277	.9233	.6517-02	.4257-02	.7050	5.331	583.7
62	225.00	.74000	1239.0	.6490-01	.8350-01	.9850-01	.9233	.5022-02	.3312-02	.5590	4.244	580.7
62	225.00	.75000	1244.0	.9490-01	.1269	.1547	.9233	.7889-02	.4839-02	.7190	5.444	600.8
62	225.00	.77100	1248.0	.8430-01	.1091	.1293	.9233	.6597-02	.4299-02	.7090	5.394	584.5
61	225.00	.80000	1093.0	.6120-01	.7840-01	.9230-01	.9233	.4703-02	.3117-02	.5310	3.871	579.0
62	225.00	.93200	1254.0	.4920-01	.6370-01	.7560-01	.9233	.3856-02	.2512-02	.4140	2.924	584.6
62	225.00	.93900	1261.0	.4230-01	.5560-01	.6670-01	.9233	.3404-02	.2158-02	.3390	2.367	592.5
63	238.00	.95300	1277.0	.1517	.2077	.2203	.9423	.1123-01	.7733-02	1.075	7.697	610.1
63	238.00	.96700	1281.0	.8010-01	.1144	.1225	.9423	.6242-02	.4081-02	.5100	3.687	624.2
63	238.00	.98000	1285.0	.8780-01	.1258	.1349	.9423	.6872-02	.4473-02	.5540	4.005	625.3
61	256.00	.11500	1094.0	.1438	.1862	.2190	.9245	.1116-01	.7329-02	1.207	8.785	584.5
61	256.00	.12800	1095.0	.6770-01	.8390-01	.9560-01	.9245	.4870-02	.3448-02	.6680	4.932	555.5
61	256.00	.14600	1096.0	.7340-01	.9200-01	.1056	.9245	.5384-02	.3742-02	.6940	5.100	563.8
62	256.00	.20000	1097.0	.7120-01	.8910-01	.1021	.9245	.5211-02	.3631-02	.6770	4.983	562.9
62	256.00	.40000	1098.0	.6190-01	.7820-01	.9030-01	.9245	.4606-02	.3159-02	.5690	3.971	569.4
62	256.00	.60000	1099.0	.5230-01	.6610-01	.7640-01	.9245	.3897-02	.2670-02	.4800	3.493	569.8
62	256.00	.80000	1100.0	.1960-01	.2550-01	.3010-01	.9245	.1536-02	.1000-02	.1620	1.179	587.3
62	270.00	.50000-01	1102.0	.2590	.3455	.3614	.9434	.1843-01	.1321-01	1.978	14.28	599.7
62	270.00	.10000+00	1103.0	.2364	.3152	.3297	.9434	.1682-01	.1206-01	1.808	13.06	599.5
62	270.00	.11500	1104.0	.1289	.1684	.1993	.9247	.1017-01	.6577-02	1.051	7.629	589.6
62	270.00	.14600	1105.0	.8680-01	.1093	.1258	.9247	.6417-02	.4429-02	.8070	5.924	567.2
62	270.00	.72400	1234.0	.9140-01	.1144	.1311	.9247	.6690-02	.4663-02	.8690	6.412	563.1
62	270.00	.74000	1240.0	.1087	.1376	.1590	.9247	.8111-02	.5546-02	.9900	7.303	570.9
62	270.00	.77100	1249.0	.7860-01	.9970-01	.1154	.9247	.5885-02	.4011-02	.7110	5.459	572.2
62	270.00	.93200	1255.0	.1562	.2018	.2367	.9247	.1208-01	.7968-02	1.322	9.407	583.5
62	270.00	.93900	1262.0	.1477	.1971	.2374	.9247	.1211-01	.7533-02	1.125	8.042	600.1
62	270.00	.95300	1110.0	.1627	.2200	.2291	.9444	.1169-01	.8301-02	1.194	8.271	605.6
62	270.00	.96700	1111.0	.3900-01	.5760-01	.6080-01	.9444	.3102-02	.1990-02	.2310	1.591	633.2
62	270.00	.98000	1112.0	.1166	.1717	.1814	.9444	.9252-02	.5950-02	.6950	4.748	632.7

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
62	270.00	.99400	1113.0	.1876	.2741	.2890	.9444	.1474-01	.9572-02	1.137	7.831	630.6
62	284.00	.11500	1114.0	.1392	.1829	.2176	.9245	.1110-01	.7102-02	1.115	8.082	592.4
62	284.00	.12800	1115.0	.6810-01	.8520-01	.9780-01	.9245	.4988-02	.3474-02	.6480	4.763	563.0
62	284.00	.14600	1116.0	.7780-01	.9840-01	.1137	.9245	.5800-02	.3969-02	.7110	5.212	570.3
62	284.00	.20000	1117.0	.6790-01	.8550-01	.9860-01	.9245	.5029-02	.3465-02	.6300	4.623	567.6
62	284.00	.40000	1118.0	.6380-01	.8030-01	.9250-01	.9245	.4718-02	.3255-02	.5940	4.167	566.9
62	284.00	.60000	1119.0	.5550-01	.6990-01	.8060-01	.9245	.4114-02	.2830-02	.5130	3.737	568.2
62	284.00	.80000	1120.0	.3130-01	.4120-01	.4900-01	.9245	.2500-02	.1599-02	.2510	1.849	592.5
62	284.00	.87500	1121.0	.2690-01	.3790-01	.4790-01	.9245	.2446-02	.1370-02	.1760	1.212	620.8
63	302.00	.98000	1282.0	.1211	.1825	.1979	.9423	.1009-01	.6172-02	.6870	4.887	637.8
63	302.00	.99400	1286.0	.8880-01	.1361	.1481	.9423	.7549-02	.4528-02	.4890	3.305	641.2
62	315.00	.92500	1122.0	.1452	.1888	.2248	.9234	.1147-01	.7408-02	1.202	8.736	587.2
62	315.00	.93900	1124.0	.8120-01	.1027	.1196	.9234	.6100-02	.4141-02	.7410	5.428	570.6
62	315.00	.95300	1125.0	.8050-01	.1019	.1188	.9234	.6061-02	.4105-02	.7310	5.352	571.4
62	315.00	.96700	1126.0	.8190-01	.1037	.1209	.9234	.6166-02	.4176-02	.7430	5.443	571.5
62	315.00	.98000	1127.0	.6760-01	.8570-01	.9990-01	.9234	.5098-02	.3448-02	.6120	4.407	572.0
62	315.00	.99400	1128.0	.7390-01	.9380-01	.1095	.9234	.5583-02	.3769-02	.6660	4.843	572.7
62	315.00	.70000	1129.0	.4790-01	.6190-01	.7340-01	.9234	.3744-02	.2444-02	.4040	2.964	584.0
62	315.00	.72400	1235.0	.5970-01	.7770-01	.9260-01	.9234	.4722-02	.3045-02	.4930	3.652	587.7
62	315.00	.74000	1241.0	.8220-01	.1098	.1336	.9234	.6817-02	.4195-02	.6260	4.664	600.1
62	315.00	.75000	1245.0	.3090-01	.4200-01	.5200-01	.9234	.2655-02	.1576-02	.2230	1.664	608.1
62	315.00	.77100	1250.0	.4710-01	.5990-01	.7000-01	.9234	.3571-02	.2401-02	.4210	3.288	574.1
62	315.00	.80000	1130.0	.6460-01	.8600-01	.1045	.9234	.5330-02	.3293-02	.4950	3.637	599.1
62	315.00	.87500	1131.0	.1056	.1505	.1946	.9234	.9926-02	.5385-02	.6760	4.625	623.9
62	315.00	1265.0	1132.0	.9600-01	.1296	.1594	.9234	.8130-02	.4896-02	.7070	4.898	605.0
62	315.00	1074.0	1256.0	.1010	.1389	.1736	.9234	.8857-02	.5150-02	.7070	4.877	612.2
63	315.00	1075.0	1263.0	.1201	.1741	.2290	.9234	.1167-01	.6119-02	.7390	5.140	628.4
62	315.00	1076.0	1133.0	.2812	.3886	.4191	.9405	.2138-01	.1435-01	1.946	13.38	613.8
62	315.00	1077.0	1134.0	.1082	.1603	.1765	.9405	.9001-02	.5522-02	.6370	4.396	634.0
62	315.00	1057.0	1135.0	.1239	.1829	.2012	.9405	.1027-01	.6319-02	.7330	5.011	633.4
62	315.00	1058.0	1136.0	.1401	.2084	.2298	.9405	.1172-01	.7149-02	.8180	5.528	635.1
62	330.00	.72400	1236.0	.1075	.1420	.1722	.9227	.8782-02	.5484-02	.8460	6.401	595.2
62	335.00	.43000-01	1212.0	.2779	.3738	.4133	.9362	.2108-01	.1418-01	2.070	14.92	603.4
62	335.00	.50000-01	1213.0	.2627	.3508	.3867	.9362	.1973-01	.1340-01	1.998	14.43	600.3
62	335.00	.57000-01	1214.0	.2537	.3362	.3694	.9362	.1885-01	.1294-01	1.977	14.30	596.7
62	335.00	.63000-01	1215.0	.2164	.2849	.3122	.9362	.1592-01	.1104-01	1.722	12.48	593.4
62	335.00	.90000-01	1216.0	.2043	.2689	.2947	.9362	.1503-01	.1042-01	1.625	11.77	593.5
62	335.00	.10000+00	1217.0	.2333	.3081	.3381	.9362	.1725-01	.1190-01	1.836	13.28	595.1
63	342.00	.95300	1275.0	.1715	.2430	.2759	.9357	.1406-01	.8742-02	1.113	7.479	621.8
63	342.00	.96700	1279.0	.1268	.1928	.2265	.9357	.1154-01	.6462-02	.7070	4.815	639.7
63	342.00	.98000	1283.0	.8070-01	.1224	.1435	.9357	.7314-02	.4114-02	.4530	3.028	639.0
63	342.00	.99400	1287.0	.4700-01	.7060-01	.8250-01	.9357	.4202-02	.2396-02	.2680	1.796	637.1
61	355.00	.95300	1016.0	.1718	.2376	.2724	.9333	.1388-01	.8756-02	1.184	8.193	614.0

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF (RVZL15)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
61	355.00	.96700	1017.0	.1283	.1892	.2247	.9333	.1145-01	.6541-02	.7620	5.258	632.7
61	355.00	.98000	1018.0	.1459	.2060	.2388	.9333	.1217-01	.7434-02	.9540	6.579	620.9

LEFT SRB

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
76	.8000-01	.0000	4.020	72.20	748.0	176.8	.4630	5.238	2619.	.2197-03	.1424-06	4.043
77	.4000-01	.0000	4.020	72.30	748.0	176.8	.4630	5.243	2619.	.2199-03	.1423-06	4.047
78	.4000-01	.0000	4.020	72.40	748.0	176.8	.4640	5.252	2619.	.2203-03	.1424-06	4.052

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
76	.5096-01	.1144-01
77	.5098-01	.1143-01
78	.5103-01	.1142-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
76	.00000	.11500	1000.0	.1280	.1598	.1856	.9220	.9457-02	.6525-02	1.229	9.051	560.0
76	.00000	.20000	1001.0	.4650-01	.5670-01	.6460-01	.9220	.3293-02	.2371-02	.4950	3.681	539.7
76	.00000	.25000	1003.0	.3580-01	.4360-01	.4970-01	.9220	.2535-02	.1825-02	.3810	2.834	539.7
76	.00000	.30000	1004.0	.5080-01	.6190-01	.7050-01	.9220	.3594-02	.2591-02	.5420	4.034	539.1
76	.00000	.50000	1006.0	.9730-01	.1198	.1376	.9220	.7011-02	.4960-02	.9900	7.236	548.8
76	.00000	.55000	1007.0	.9950-01	.1226	.1410	.9220	.7186-02	.5070-02	1.005	7.342	550.1
76	.00000	.60000	1008.0	.9060-01	.1112	.1275	.9220	.6500-02	.4615-02	.9290	6.889	547.0
76	.00000	.65000	1009.0	.8180-01	.1011	.1165	.9220	.5935-02	.4171-02	.8190	6.016	552.0
76	.00000	.70000	1010.0	.6610-01	.8250-01	.9580-01	.9220	.4884-02	.3369-02	.6340	4.828	560.2
77	.00000	.72400	1232.0	.4870-01	.6130-01	.7180-01	.9220	.3659-02	.2484-02	.4520	3.418	566.4
77	.00000	.74000	1242.0	.1138	.1445	.1702	.9220	.8679-02	.5800-02	1.020	7.864	572.3
76	.00000	.75000	1011.0	.8350-01	.1071	.1272	.9220	.6485-02	.4256-02	.7230	5.651	578.5
77	.00000	.77100	1251.0	.4640-01	.5730-01	.6610-01	.9220	.3368-02	.2366-02	.4640	3.652	552.0
76	.00000	.80000	1012.0	.6460-01	.8130-01	.9490-01	.9220	.4838-02	.3295-02	.6030	4.581	565.4
76	.00000	.87500	1013.0	.1136	.1457	.1730	.9220	.8818-02	.5791-02	.9840	6.888	578.3
77	.00000	.93200	1257.0	.7710-01	.9720-01	.1139	.9220	.5809-02	.3929-02	.7080	4.966	567.9
77	4.3800	.96500	1220.0	.1133	.1475	.1648	.9327	.8403-02	.5777-02	.9310	6.882	587.0
77	4.3800	.97500	1221.0	.1373	.1797	.2013	.9327	.1026-01	.6999-02	1.109	8.161	589.7

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF

(RVZL17)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
77	4.3800	.98500	1222.0	.1194	.1550	.1728	.9327	.8810-02	.6090-02	.9940	7.254	585.0
77	4.3800	.99500	1223.0	.9460-01	.1226	.1366	.9327	.6964-02	.4823-02	.7900	5.753	584.3
77	5.0000	.90000-01	1210.0	.1713	.2168	.2398	.9319	.1223-01	.8735-02	1.557	11.42	569.9
77	5.0000	10.000	1211.0	.1800	.2265	.2499	.9319	.1274-01	.9177-02	1.671	12.27	566.1
77	20.000	.96500	1224.0	.1047	.1366	.1527	.9327	.7784-02	.5339-02	.8560	6.220	587.8
77	20.000	.97500	1225.0	.1187	.1548	.1730	.9327	.8821-02	.6052-02	.9710	7.056	587.7
77	20.000	.98500	1226.0	.1019	.1322	.1474	.9327	.7515-02	.5194-02	.8470	6.205	585.1
77	35.000	10.000	1208.0	.1693	.2119	.2331	.9320	.1189-01	.8630-02	1.604	11.80	562.3
77	40.000	.96500	1228.0	.3500-01	.4430-01	.4870-01	.9327	.2484-02	.1786-02	.3200	2.366	568.8
77	40.000	.97500	1229.0	.5690-01	.7220-01	.7960-01	.9327	.4059-02	.2900-02	.5110	3.770	571.9
77	40.000	.99500	1231.0	.5690-01	.7260-01	.8030-01	.9327	.4094-02	.2901-02	.5010	3.663	575.4
76	45.000	.11500	1020.0	.8730-01	.1083	.1251	.9220	.6375-02	.4451-02	.8610	6.358	554.9
76	45.000	.14300	1021.0	.7220-01	.8830-01	.1010	.9220	.5149-02	.3678-02	.7510	5.580	544.0
76	45.000	.17100	1022.0	.8140-01	.9960-01	.1138	.9220	.5797-02	.4150-02	.8530	6.336	542.8
76	45.000	.20000	1023.0	.6120-01	.7440-01	.8470-01	.9220	.4316-02	.3119-02	.6560	4.888	537.9
76	45.000	.30000	1024.0	.4410-01	.5370-01	.6110-01	.9220	.3116-02	.2247-02	.4700	3.502	539.0
76	45.000	.55000	1027.0	.1372	.1689	.1940	.9220	.9888-02	.6991-02	1.393	10.25	549.0
76	45.000	.70000	1030.0	.6880-01	.8620-01	.1004	.9220	.5114-02	.3505-02	.6500	4.863	562.8
76	45.000	.80000	1031.0	.5980-01	.7510-01	.8760-01	.9220	.4463-02	.3050-02	.5630	4.206	563.9
76	45.000	.87500	1032.0	.1870-01	.2330-01	.2720-01	.9220	.1384-02	.9513-03	.1770	1.256	561.7
76	45.000	.92500	1033.0	.2850-01	.3510-01	.4030-01	.9220	.2052-02	.1454-02	.2910	2.067	548.1
77	45.000	.93200	1258.0	.3590-01	.4450-01	.5150-01	.9220	.2623-02	.1832-02	.3550	2.594	554.6
78	45.000	.93900	1264.0	.3920-01	.4860-01	.5610-01	.9220	.2862-02	.2002-02	.3890	2.838	554.0
76	50.000	.95300	1034.0	.3900-01	.4810-01	.5230-01	.9327	.2668-02	.1986-02	.3910	2.793	551.2
76	50.000	.96700	1035.0	.5170-01	.6500-01	.7130-01	.9327	.3636-02	.2637-02	.4840	3.451	564.9
76	50.000	.98000	1036.0	.7800-01	.9830-01	.1081	.9327	.5509-02	.3974-02	.7190	5.057	567.4
77	65.000	.43000-01	1200.0	.2666	.3400	.3775	.9320	.1924-01	.1359-01	2.354	17.21	575.0
77	65.000	.50000-01	1201.0	.2082	.2629	.2904	.9320	.1481-01	.1062-01	1.909	14.00	568.4
77	65.000	.57000-01	1202.0	.1832	.2303	.2539	.9320	.1295-01	.9338-02	1.705	12.53	565.6
77	65.000	.63000-01	1203.0	.1582	.1994	.2201	.9320	.1122-01	.8066-02	1.460	10.71	567.2
77	65.000	.90000-01	1204.0	.1163	.1470	.1625	.9320	.8287-02	.5928-02	1.060	7.771	569.4
77	65.000	.10000+00	1205.0	.1224	.1548	.1711	.9320	.8723-02	.6240-02	1.116	8.183	569.4
78	76.000	.12000	1290.0	.1247	.1560	.1815	.9220	.9264-02	.6364-02	1.187	8.507	561.9
78	76.000	.12700	1291.0	.1104	.1388	.1621	.9220	.8273-02	.5635-02	1.032	7.456	565.3
78	76.000	.13400	1292.0	.1487	.1901	.2251	.9220	.1149-01	.7588-02	1.305	9.316	576.4
78	76.000	.17300	1293.0	.6760-01	.8310-01	.9530-01	.9220	.4861-02	.3449-02	.6930	5.107	547.3
78	76.000	.18000	1294.0	.6220-01	.7600-01	.8680-01	.9220	.4427-02	.3174-02	.6540	4.785	542.2
78	76.000	.18600	1295.0	.5350-01	.6510-01	.7410-01	.9220	.3781-02	.2730-02	.5730	4.242	538.3
78	76.000	.19300	1296.0	.4310-01	.5220-01	.5930-01	.9220	.3026-02	.2198-02	.4690	3.489	534.9
78	76.000	.20000	1297.0	.3960-01	.4790-01	.5430-01	.9220	.2771-02	.2021-02	.4360	3.234	532.7
76	90.000	.20000-02	1039.0	.4397	.5905	.5106	.9728	.2602-01	.2241-01	3.285	23.32	601.7
76	90.000	.10000+00	1042.0	.1748	.2233	.2481	.9320	.1264-01	.8908-02	1.535	11.22	576.0
76	90.000	.13400	1045.0	.3992	.6132	.8763	.9220	.4466-01	.2035-01	2.181	15.44	641.1

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
76	90.000	.17300	1046.0	.7940-01	.9800-01	.1128	.9220	.5749-02	.4048-02	.7990	5.911	551.0
76	90.000	.18000	1047.0	.6840-01	.8320-01	.9470-01	.9220	.4827-02	.3484-02	.7310	5.442	538.5
76	90.000	.18600	1048.0	.6250-01	.7650-01	.8740-01	.9220	.4454-02	.3184-02	.6520	4.843	543.5
76	90.000	.19300	1049.0	.5700-01	.6960-01	.7940-01	.9220	.4045-02	.2907-02	.6040	4.490	540.7
76	90.000	.20000	1050.0	.5660-01	.6900-01	.7860-01	.9220	.4004-02	.2884-02	.6020	4.478	539.7
76	90.000	.25000	1051.0	.3030-01	.3680-01	.4190-01	.9220	.2133-02	.1543-02	.3250	2.425	537.4
76	90.000	.30000	1052.0	.2400-01	.2900-01	.3300-01	.9220	.1681-02	.1221-02	.2610	1.944	534.9
76	90.000	.50000	1054.0	.5430-01	.6670-01	.7660-01	.9220	.3902-02	.2766-02	.5540	4.042	547.9
76	90.000	.60000	1055.0	.4390-01	.5430-01	.6260-01	.9220	.3188-02	.2235-02	.4370	3.206	553.0
76	90.000	.75000	1057.0	.2594	.3577	.4542	.9220	.2315-01	.1322-01	1.799	13.59	612.2
76	90.000	.80000	1058.0	.4100-01	.5080-01	.5870-01	.9220	.2992-02	.2090-02	.4040	2.987	554.8
76	90.000	.87500	1059.0	.1460-01	-.2020-01	-.8700-02	.9220	-.4413-03	.7427-03	.1600-01	.1050	726.5
76	90.000	.92500	1060.0	.4380-01	.5340-01	.6080-01	.9220	.3099-02	.2234-02	.4670	3.341	539.3
76	90.000	.95300	1061.0	.4100-01	.5040-01	.5470-01	.9327	.2789-02	.2091-02	.4210	3.020	547.0
76	90.000	.96700	1062.0	.4600-01	.5720-01	.6240-01	.9327	.3181-02	.2346-02	.4500	3.235	556.4
76	90.000	.98000	1063.0	.5170-01	.6450-01	.7050-01	.9327	.3593-02	.2633-02	.4960	3.514	559.9
76	90.000	.99400	1064.0	.5590-01	.7000-01	.7670-01	.9327	.3909-02	.2847-02	.5280	3.746	562.9
76	135.00	.14300	1066.0	.9770-01	.1227	.1433	.9220	.7302-02	.4979-02	.9130	6.712	564.8
76	135.00	.20000	1068.0	.4630-01	.5660-01	.6470-01	.9220	.3298-02	.2360-02	.4840	3.599	543.1
76	135.00	.30000	1069.0	.3280-01	.3990-01	.4540-01	.9220	.2315-02	.1671-02	.3500	2.608	538.7
76	135.00	.50000	1070.0	.4640-01	.5810-01	.6760-01	.9220	.3448-02	.2362-02	.4380	3.170	562.9
76	135.00	.60000	1071.0	.3790-01	.4780-01	.5600-01	.9220	.2856-02	.1933-02	.3490	2.561	567.7
76	135.00	.70000	1072.0	.3620-01	.4600-01	.5430-01	.9220	.2769-02	.1843-02	.3220	2.395	573.7
77	135.00	.72400	1237.0	.1121	.1435	.1703	.9220	.8682-02	.5713-02	.9750	7.391	577.5
77	135.00	.74000	1243.0	.1025	.1355	.1652	.9220	.8425-02	.5226-02	.8030	6.082	594.5
77	135.00	.75000	1246.0	.8660-01	.1194	.1515	.9220	.7724-02	.4413-02	.6010	4.493	612.1
77	135.00	.77100	1252.0	.1180	.1510	.1790	.9220	.9129-02	.6014-02	1.029	7.747	577.1
76	135.00	.80000	1073.0	.3750-01	.4710-01	.5490-01	.9220	.2797-02	.1911-02	.3520	2.630	564.2
77	135.00	.93200	1259.0	.2220-01	.2730-01	.3130-01	.9220	.1598-02	.1133-02	.2280	1.670	547.4
78	135.00	.93900	1265.0	.8600-02	.1060-01	.1210-01	.9220	.6197-03	.4373-03	.8700-01	.6340	550.1
76	135.00	.95300	1074.0	.4950-01	.6090-01	.6620-01	.9328	.3372-02	.2523-02	.5040	3.602	548.5
76	135.00	.98000	1076.0	.1660-01	.2110-01	.2330-01	.9328	.1188-02	.8484-03	.1490	1.051	572.3
78	138.00	.95300	1266.0	.4480-01	.5550-01	.6040-01	.9327	.3082-02	.2288-02	.4470	3.165	553.1
78	138.00	.96700	1268.0	.2170-01	.2780-01	.3080-01	.9327	.1569-02	.1109-02	.1900	1.328	576.8
78	138.00	.98000	1270.0	.1760-01	.2260-01	.2500-01	.9327	.1277-02	.8995-03	.1530	1.061	578.2
78	162.00	.95300	1267.0	.5440-01	.6880-01	.7580-01	.9327	.3866-02	.2774-02	.4940	3.576	570.1
78	162.00	.96700	1269.0	.3920-01	.5130-01	.5740-01	.9327	.2928-02	.2000-02	.3180	2.283	589.5
78	162.00	.98000	1271.0	.5910-01	.7730-01	.8650-01	.9327	.4415-02	.3017-02	.4800	3.438	589.4
76	180.00	.20000	1078.0	.3150-01	.3840-01	.4370-01	.9220	.2227-02	.1605-02	.3360	2.501	539.1
76	180.00	.40000	1079.0	.4390-01	.5460-01	.6320-01	.9220	.3222-02	.2237-02	.4270	3.041	557.3
76	180.00	.60000	1080.0	.5700-01	.7180-01	.8400-01	.9220	.4282-02	.2904-02	.5270	3.865	567.0
76	180.00	.70000	1081.0	.3760-01	.4740-01	.5560-01	.9220	.2834-02	.1916-02	.3450	2.600	568.2
77	180.00	.74000	1238.0	.9820-01	.1261	.1499	.9220	.7643-02	.5007-02	.8470	6.373	579.0

IH72, OTS W/PROTUBERANCES, LEFT SRB H1/HREF (RVZL17)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
76	180.00	.75000	1082.0	.6800-01	.8710-01	.1034	.9220	.5268-02	.3467-02	.5920	4.632	577.5
77	180.00	.77100	1247.0	.5540-01	.6930-01	.8060-01	.9220	.4109-02	.2824-02	.5270	4.129	561.5
76	180.00	.80000	1083.0	.6750-01	.8620-01	.1020	.9220	.5200-02	.3441-02	.5940	4.412	575.8
77	180.00	.93200	1253.0	.4940-01	.6200-01	.7240-01	.9220	.3694-02	.2517-02	.4610	3.322	565.0
77	180.00	.93900	1260.0	.2250-01	.2870-01	.3380-01	.9220	.1724-02	.1148-02	.2010	1.430	573.5
76	180.00	.96700	1085.0	.4340-01	.5660-01	.6320-01	.9328	.3220-02	.2212-02	.3550	2.490	587.7
76	180.00	.98000	1086.0	.5710-01	.7430-01	.8280-01	.9328	.4221-02	.2910-02	.4710	3.313	586.5
76	180.00	.99400	1087.0	.4510-01	.5910-01	.6610-01	.9328	.3370-02	.2299-02	.3640	2.541	590.0
78	198.00	.95300	1276.0	.1013	.1281	.1411	.9327	.7199-02	.5168-02	.9220	6.803	570.0
78	198.00	.96700	1280.0	.6790-01	.8910-01	.9980-01	.9327	.5094-02	.3464-02	.5450	3.925	591.1
78	198.00	.98000	1284.0	.7860-01	.1029	.1152	.9327	.5876-02	.4010-02	.6360	4.568	589.9
76	225.00	.11500	1088.0	.1075	.1352	.1580	.9220	.8052-02	.5478-02	1.000	7.348	565.7
76	225.00	.17700	1090.0	.2390-01	.2900-01	.3300-01	.9220	.1682-02	.1218-02	.2580	1.923	536.6
76	225.00	.60000	1091.0	.4100-01	.5090-01	.5870-01	.9220	.2994-02	.2091-02	.4050	2.989	554.8
76	225.00	.70000	1092.0	.4670-01	.5800-01	.6720-01	.9220	.3423-02	.2378-02	.4550	3.390	557.0
77	225.00	.72400	1233.0	.5060-01	.6300-01	.7310-01	.9220	.3725-02	.2578-02	.4890	3.740	558.6
77	225.00	.74000	1239.0	.4880-01	.6070-01	.7030-01	.9220	.3586-02	.2488-02	.4740	3.645	557.5
77	225.00	.75000	1244.0	.9410-01	.1183	.1383	.9220	.7052-02	.4797-02	.8760	6.747	565.7
77	225.00	.77100	1248.0	.6290-01	.7820-01	.9060-01	.9220	.4620-02	.3207-02	.6120	4.717	557.4
76	225.00	.80000	1093.0	.4770-01	.5910-01	.6820-01	.9220	.3478-02	.2430-02	.4700	3.475	554.7
77	225.00	.93200	1254.0	.5420-01	.6800-01	.7920-01	.9220	.4038-02	.2763-02	.5110	3.648	563.3
77	225.00	.93900	1261.0	.5060-01	.6390-01	.7490-01	.9220	.3816-02	.2581-02	.4650	3.293	567.9
78	238.00	.95300	1277.0	.9110-01	.1141	.1249	.9327	.6376-02	.4650-02	.8650	6.342	562.4
78	238.00	.96700	1281.0	.5100-01	.6560-01	.7280-01	.9327	.3713-02	.2603-02	.4390	3.242	579.9
78	238.00	.98000	1285.0	.7060-01	.9070-01	.1006	.9327	.5133-02	.3603-02	.6090	4.502	579.4
78	238.00	.99400	1289.0	.5340-01	.6840-01	.7570-01	.9327	.3863-02	.2725-02	.4650	3.376	577.5
76	256.00	.11500	1094.0	.1004	.1256	.1462	.9220	.7452-02	.5116-02	.9530	7.012	562.1
76	256.00	.12600	1095.0	.4670-01	.5700-01	.6490-01	.9220	.3307-02	.2382-02	.4970	3.702	539.5
76	256.00	.14600	1096.0	.3970-01	.4840-01	.5510-01	.9220	.2809-02	.2022-02	.4210	3.130	540.2
77	256.00	.20000	1097.0	.3780-01	.4570-01	.5180-01	.9220	.2639-02	.1928-02	.4180	3.122	531.6
77	256.00	.40000	1098.0	.4120-01	.5040-01	.5760-01	.9220	.2936-02	.2099-02	.4300	3.040	543.5
77	256.00	.60000	1099.0	.4650-01	.5700-01	.6530-01	.9220	.3327-02	.2369-02	.4800	3.538	545.6
77	256.00	.80000	1100.0	.3450-01	.4270-01	.4920-01	.9220	.2511-02	.1761-02	.3440	2.545	552.7
77	256.00	.87500	1101.0	.2840-01	.3550-01	.4130-01	.9220	.2104-02	.1448-02	.2710	1.901	560.9
77	270.00	.50000-01	1102.0	.1888	.2407	.2672	.9320	.1362-01	.9624-02	1.668	12.19	574.9
77	270.00	.10000+00	1103.0	.1617	.2052	.2273	.9320	.1159-01	.8242-02	1.453	10.64	572.0
77	270.00	.11500	1104.0	.9110-01	.1144	.1336	.9220	.6810-02	.4644-02	.8520	6.263	564.7
77	270.00	.14600	1105.0	.5710-01	.7010-01	.8020-01	.9220	.4091-02	.2912-02	.5900	4.377	545.7
77	270.00	.72400	1234.0	.4620-01	.5610-01	.6370-01	.9220	.3249-02	.2355-02	.5000	3.740	535.9
77	270.00	.74000	1240.0	.5850-01	.7140-01	.8150-01	.9220	.4153-02	.2984-02	.6190	4.636	540.8
77	270.00	.77100	1249.0	.3840-01	.4700-01	.5390-01	.9220	.2746-02	.1956-02	.3970	3.090	545.3
77	270.00	.93200	1255.0	.8370-01	.1030	.1182	.9220	.6025-02	.4269-02	.8550	6.190	548.0
77	270.00	.93900	1262.0	.8790-01	.1088	.1255	.9220	.6401-02	.4481-02	.8720	6.380	553.6

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF

(RVZL17)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
77	270.00	.95300	1110.0	.7900-01	.9830-01	.1073	.9327	.5470-02	.4030-02	.7710	5.467	557.0
77	270.00	.96700	1111.0	.9210-01	.1169	.1290	.9327	.6575-02	.4697-02	.8280	5.864	572.0
77	270.00	.98000	1112.0	.1038	.1319	.1455	.9327	.7419-02	.5293-02	.9300	6.544	572.5
77	270.00	.99400	1113.0	.1151	.1464	.1615	.9327	.8237-02	.5868-02	1.027	7.276	573.1
77	284.00	.11500	1114.0	.9880-01	.1242	.1452	.9220	.7402-02	.5036-02	.9190	6.753	565.6
77	284.00	.12800	1115.0	.4350-01	.5310-01	.6070-01	.9220	.3094-02	.2216-02	.4560	3.388	542.5
77	284.00	.14600	1116.0	.3950-01	.4830-01	.5530-01	.9220	.2819-02	.2012-02	.4100	3.045	544.4
77	284.00	.20000	1117.0	.3460-01	.4220-01	.4810-01	.9220	.2454-02	.1765-02	.3670	2.732	540.2
77	284.00	.40000	1118.0	.3930-01	.4790-01	.5460-01	.9220	.2783-02	.2003-02	.4170	2.964	540.0
77	284.00	.60000	1119.0	.4440-01	.5400-01	.6140-01	.9220	.3131-02	.2262-02	.4760	3.521	537.9
77	284.00	.80000	1120.0	.4040-01	.5020-01	.5820-01	.9220	.2966-02	.2059-02	.3930	2.948	557.3
77	284.00	.87500	1121.0	.6600-01	.8310-01	.9710-01	.9220	.4952-02	.3364-02	.6120	4.325	566.1
78	302.00	.98000	1282.0	.1383	.1758	.1940	.9327	.9899-02	.7055-02	1.237	9.085	573.0
78	302.00	.99400	1286.0	.1347	.1721	.1905	.9327	.9719-02	.6874-02	1.183	8.261	576.3
77	315.00	.92500	1122.0	.1051	.1319	.1538	.9220	.7841-02	.5360-02	.9890	7.269	563.8
77	315.00	.93900	1124.0	.2450-01	.2990-01	.3410-01	.9220	.1738-02	.1252-02	.2610	1.942	539.7
77	315.00	.95300	1125.0	.3450-01	.4210-01	.4810-01	.9220	.2450-02	.1756-02	.3620	2.692	542.1
77	315.00	.96700	1126.0	.4830-01	.5910-01	.6750-01	.9220	.3440-02	.2463-02	.5060	3.759	542.8
77	315.00	.98000	1127.0	.4940-01	.6060-01	.6940-01	.9220	.3538-02	.2517-02	.5090	3.717	545.9
77	315.00	.99400	1128.0	.8060-01	.9920-01	.1140	.9220	.5810-02	.4110-02	.8200	6.035	548.7
77	315.00	.70000	1129.0	.6440-01	.7980-01	.9210-01	.9220	.4697-02	.3284-02	.6370	4.739	554.2
77	315.00	.72400	1235.0	.6380-01	.7930-01	.9170-01	.9220	.4674-02	.3254-02	.6250	4.707	556.1
77	315.00	.74000	1241.0	.9720-01	.1219	.1422	.9220	.7251-02	.4956-02	.9140	6.926	563.8
77	315.00	.75000	1245.0	.6380-01	.8030-01	.9390-01	.9220	.4789-02	.3252-02	.5910	4.508	566.4
77	315.00	.77100	1250.0	.2580-01	.3170-01	.3630-01	.9220	.1852-02	.1316-02	.2660	2.104	546.4
77	315.00	.80000	1130.0	.5200-01	.6530-01	.7630-01	.9220	.3889-02	.2652-02	.4870	3.637	564.7
77	315.00	.87500	1131.0	.9010-01	.1151	.1363	.9220	.6948-02	.4596-02	.7920	5.551	575.8
77	315.00	1265.0	1132.0	.6030-01	.7590-01	.8890-01	.9220	.4532-02	.3073-02	.5570	3.931	566.9
78	315.00	1074.0	1256.0	.8440-01	.1065	.1249	.9220	.6369-02	.4302-02	.7740	5.456	568.4
77	315.00	1075.0	1263.0	.1432	.1803	.2108	.9220	.1076-01	.7309-02	1.332	9.557	566.2
77	315.00	1076.0	1133.0	.1433	.1796	.1968	.9327	.1004-01	.7306-02	1.353	9.537	563.0
77	315.00	1077.0	1134.0	.1463	.1884	.2092	.9327	.1067-01	.7460-02	1.251	8.853	580.6
77	315.00	1057.0	1135.0	.1455	.1863	.2064	.9327	.1052-01	.7418-02	1.266	8.891	577.5
77	315.00	1058.0	1136.0	.1331	.1705	.1888	.9327	.9628-02	.6786-02	1.158	8.054	577.5
77	330.00	.72400	1236.0	.7620-01	.9570-01	.1117	.9220	.5693-02	.3884-02	.7130	5.482	564.5
77	335.00	.43000-01	1212.0	.2050	.2619	.2911	.9320	.1484-01	.1045-01	1.799	13.15	576.0
77	335.00	.50000-01	1213.0	.1884	.2404	.2671	.9320	.1362-01	.9606-02	1.660	12.14	575.4
77	335.00	.57000-01	1214.0	.1767	.2248	.2493	.9320	.1271-01	.9007-02	1.574	11.52	573.5
77	335.00	.63000-01	1215.0	.1510	.1919	.2127	.9320	.1085-01	.7697-02	1.350	9.884	572.8
77	335.00	.90000-01	1216.0	.1688	.2138	.2366	.9320	.1206-01	.8607-02	1.530	11.21	570.4
77	335.00	.10000+00	1217.0	.1838	.2318	.2560	.9320	.1305-01	.9369-02	1.690	12.40	567.8
78	342.00	.95300	1275.0	.1262	.1615	.1788	.9327	.9126-02	.6442-02	1.104	7.582	577.0
78	342.00	.96700	1279.0	.1540	.2024	.2272	.9327	.1159-01	.7857-02	1.228	8.562	592.1

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF (RVZL17)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
78	342.00	.98000	1283.0	.1527	.1987	.2219	.9327	.1132-01	.7794-02	1.261	8.645	586.6
78	342.00	.99400	1287.0	.1277	.1654	.1843	.9327	.9405-02	.6514-02	1.068	7.332	584.4
76	355.00	.95300	1016.0	.1203	.1543	.1711	.9326	.8721-02	.6131-02	1.041	7.328	578.5
76	355.00	.96700	1017.0	.1414	.1867	.2101	.9326	.1071-01	.7205-02	1.110	7.808	594.2
76	355.00	.98000	1018.0	.1263	.1642	.1833	.9326	.9342-02	.6436-02	1.043	7.318	586.2
76	355.00	.99400	1019.0	.1054	.1364	.1519	.9326	.7739-02	.5374-02	.8860	6.166	583.4

LEFT SRB

PARAMETRIC DATA

ALPHA = .0000 BETA = 9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
58	.2000-01	9.100	4.020	72.20	748.0	176.9	.4630	5.238	2620.	.2197-03	.1424-06	4.042
59	.2000-01	9.100	4.020	72.30	749.0	176.9	.4630	5.243	2620.	.2198-03	.1424-06	4.045
60	.2000-01	9.100	4.020	72.20	748.0	176.9	.4630	5.238	2620.	.2197-03	.1424-06	4.041

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
58	.5097-01	.1144-01
59	.5099-01	.1143-01
60	.5097-01	.1144-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
58	.00000	.11500	1000.0	.7690-01	.9750-01	.1147	.9220	.5847-02	.3917-02	.6930	5.076	571.5
58	.00000	.20000	1001.0	.3330-01	.4120-01	.4760-01	.9220	.2428-02	.1695-02	.3270	2.418	555.2
58	.00000	.25000	1003.0	.2560-01	.3160-01	.3650-01	.9220	.1860-02	.1303-02	.2540	1.877	553.5
58	.00000	.30000	1004.0	.2880-01	.3560-01	.4100-01	.9220	.2088-02	.1470-02	.2900	2.145	551.2
58	.00000	.50000	1006.0	.5550-01	.6900-01	.7990-01	.9220	.4075-02	.2829-02	.5400	3.931	557.5
58	.00000	.55000	1007.0	.4090-01	.5070-01	.5860-01	.9220	.2989-02	.2083-02	.4010	2.923	555.8
58	.00000	.60000	1008.0	.4420-01	.5480-01	.6330-01	.9220	.3226-02	.2252-02	.4360	3.216	555.1
58	.00000	.65000	1009.0	.3410-01	.4260-01	.4950-01	.9220	.2524-02	.1739-02	.3260	2.386	560.8
58	.00000	.70000	1010.0	.5990-01	.7580-01	.8900-01	.9220	.4536-02	.3055-02	.5460	4.144	569.6
59	.00000	.72400	1232.0	.5090-01	.6320-01	.7310-01	.9220	.3730-02	.2596-02	.4980	3.791	556.5
59	.00000	.74000	1242.0	.1328	.1710	.2038	.9220	.1039-01	.6771-02	1.135	8.707	580.9
58	.00000	.75000	1011.0	.1512	.1957	.2342	.9220	.1194-01	.7706-02	1.269	9.898	583.8
59	.00000	.77100	1251.0	.2050-01	.2490-01	.2830-01	.9220	.1445-02	.1043-02	.2190	1.733	538.8
58	.00000	.80000	1012.0	.3960-01	.4890-01	.5640-01	.9220	.2874-02	.2016-02	.3940	3.017	552.8
58	.00000	.87500	1013.0	.3570-01	.4460-01	.5190-01	.9220	.2644-02	.1818-02	.3400	2.397	561.6
59	.00000	.93200	1257.0	.4210-01	.5230-01	.6050-01	.9220	.3087-02	.2145-02	.4110	2.894	557.1
59	4.3800	.96500	1220.0	.5050-01	.6340-01	.6930-01	.9332	.3531-02	.2577-02	.4770	3.567	563.4
59	4.3800	.97500	1221.0	.7810-01	.9830-01	.1077	.9332	.5489-02	.3981-02	.7240	5.392	566.5

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
59	4.3800	.98500	1222.0	.7670-01	.9670-01	.1060	.9332	.5403-02	.3909-02	.7070	5.208	567.6
59	4.3800	.99500	1223.0	.7120-01	.9000-01	.9880-01	.9332	.5036-02	.3629-02	.6500	4.766	569.4
59	5.0000	.50000-01	1209.0	.7530-01	.9180-01	.9940-01	.9326	.5067-02	.3841-02	.8020	6.006	539.8
59	5.0000	.90000-01	1210.0	.9020-01	.1160	.1288	.9326	.6567-02	.4600-02	.7750	5.652	580.0
59	5.0000	10.000	1211.0	.1186	.1536	.1712	.9326	.8727-02	.6048-02	.9950	7.240	584.1
59	20.000	.96500	1224.0	.8820-01	.1115	.1204	.9360	.6140-02	.4498-02	.8060	5.909	569.4
59	20.000	.97500	1225.0	.9840-01	.1248	.1349	.9360	.6876-02	.5017-02	.8890	6.512	571.3
59	20.000	.98500	1226.0	.8680-01	.1093	.1178	.9360	.6007-02	.4428-02	.8070	5.966	566.3
59	35.000	10.000	1208.0	.1165	.1511	.1629	.9379	.8306-02	.5938-02	.9690	7.046	585.4
59	40.000	.96500	1228.0	.9060-01	.1156	.1227	.9396	.6255-02	.4622-02	.8000	5.889	575.4
59	40.000	.97500	1229.0	.8440-01	.1086	.1154	.9396	.5885-02	.4305-02	.7250	5.325	580.1
59	40.000	.99500	1231.0	.4710-01	.6080-01	.6470-01	.9396	.3300-02	.2399-02	.3980	2.896	582.8
58	45.000	.14300	1021.0	.5670-01	.7040-01	.8070-01	.9234	.4115-02	.2889-02	.5560	4.104	556.0
58	45.000	.17100	1022.0	.5450-01	.6770-01	.7780-01	.9234	.3966-02	.2777-02	.5320	3.922	557.1
58	45.000	.55000	1027.0	.5000-01	.6190-01	.7080-01	.9234	.3609-02	.2550-02	.4990	3.661	552.9
58	45.000	.70000	1030.0	.1083	.1377	.1611	.9234	.8210-02	.5518-02	.9650	7.182	573.5
58	45.000	.80000	1031.0	.3350-01	.4190-01	.4830-01	.9234	.2462-02	.1710-02	.3210	2.403	560.8
58	45.000	.87500	1032.0	.3770-01	.4730-01	.5470-01	.9234	.2790-02	.1919-02	.3530	2.495	564.5
58	45.000	.92500	1033.0	.3600-01	.4530-01	.5260-01	.9234	.2680-02	.1836-02	.3350	2.356	566.2
59	45.000	.93200	1258.0	.4680-01	.5880-01	.6810-01	.9233	.3473-02	.2385-02	.4370	3.180	565.3
60	45.000	.93900	1264.0	.5770-01	.7300-01	.8490-01	.9233	.4327-02	.2942-02	.5270	3.817	569.2
58	50.000	.95300	1034.0	.6740-01	.8560-01	.8990-01	.9412	.4580-02	.3434-02	.6040	4.268	572.5
58	50.000	.96700	1035.0	.9290-01	.1205	.1272	.9412	.6480-02	.4737-02	.7750	5.476	584.8
58	50.000	.98000	1036.0	.7680-01	.9950-01	.1050	.9412	.5351-02	.3913-02	.6410	4.471	584.6
59	65.000	.43000-01	1200.0	.1793	.2383	.2514	.9421	.1282-01	.9141-02	1.381	9.988	597.4
59	65.000	.50000-01	1201.0	.1353	.1764	.1852	.9421	.9445-02	.6900-02	1.110	8.067	587.6
59	65.000	.57000-01	1202.0	.1201	.1554	.1629	.9421	.8307-02	.6126-02	1.011	7.360	583.5
59	65.000	.63000-01	1203.0	.9520-01	.1223	.1281	.9421	.6531-02	.4856-02	.8210	5.986	579.6
59	65.000	.90000-01	1204.0	.1225	.1567	.1639	.9421	.8359-02	.6247-02	1.072	7.830	576.9
59	65.000	.10000+00	1205.0	.1556	.2004	.2100	.9421	.1071-01	.7932-02	1.327	9.671	581.3
60	76.000	.12000	1290.0	.9130-01	.1150	.1326	.9245	.6756-02	.4653-02	.8450	6.039	567.0
60	76.000	.12700	1291.0	.9240-01	.1168	.1350	.9245	.6878-02	.4710-02	.8440	6.088	569.3
60	76.000	.13400	1292.0	.1065	.1383	.1631	.9245	.8313-02	.5428-02	.8840	6.280	585.7
60	76.000	.17300	1293.0	.3990-01	.4930-01	.5590-01	.9245	.2850-02	.2035-02	.4020	2.959	550.8
60	76.000	.18000	1294.0	.3390-01	.4170-01	.4720-01	.9245	.2405-02	.1729-02	.3480	2.535	547.4
60	76.000	.18600	1295.0	.3040-01	.3730-01	.4210-01	.9245	.2147-02	.1548-02	.3130	2.310	546.0
60	76.000	.19300	1296.0	.2750-01	.3370-01	.3800-01	.9245	.1937-02	.1401-02	.2860	2.118	544.3
60	76.000	.20000	1297.0	.2460-01	.3020-01	.3410-01	.9245	.1737-02	.1256-02	.2570	1.892	544.3
58	90.000	.20000-02	1039.0	.3195	.4710	.3486	.9870	.1777-01	.1628-01	1.894	13.24	632.2
58	90.000	.10000+00	1042.0	.1204	.1568	.1633	.9434	.8324-02	.6137-02	.9890	7.189	587.3
58	90.000	.13400	1045.0	.1909	.2910	.3962	.9247	.2019-01	.9729-02	1.058	7.497	639.7
58	90.000	.17300	1046.0	.4400-01	.5400-01	.6100-01	.9247	.3111-02	.2244-02	.4540	3.365	546.3
58	90.000	.18000	1047.0	.3570-01	.4350-01	.4890-01	.9247	.2494-02	.1818-02	.3780	2.815	540.4

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF

(RVZL19)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
58	90.000	.18600	1048.0	.3620-01	.4450-01	.5030-01	.9247	.2565-02	.1845-02	.3710	2.748	547.6
58	90.000	.19300	1049.0	.3210-01	.3940-01	.4460-01	.9247	.2273-02	.1636-02	.3290	2.438	547.4
58	90.000	.20000	1050.0	.2960-01	.3630-01	.4100-01	.9247	.2089-02	.1508-02	.3050	2.265	545.9
58	90.000	.25000	1051.0	.2150-01	.2650-01	.3000-01	.9247	.1529-02	.1096-02	.2180	1.614	549.5
58	90.000	.30000	1052.0	.4050-01	.5020-01	.5710-01	.9247	.2910-02	.2065-02	.4010	2.962	554.3
58	90.000	.50000	1054.0	.4860-01	.6020-01	.6860-01	.9247	.3495-02	.2475-02	.4780	3.472	555.3
58	90.000	.60000	1055.0	.4010-01	.4940-01	.5600-01	.9247	.2853-02	.2043-02	.4050	2.981	550.0
58	90.000	.70000	1056.0	.8060-01	.1016	.1169	.9247	.5958-02	.4110-02	.7470	5.450	566.7
58	90.000	.75000	1057.0	.1123	.1472	.1746	.9247	.8901-02	.5723-02	.9030	6.900	590.6
58	90.000	.80000	1058.0	.3970-01	.4950-01	.5650-01	.9247	.2879-02	.2025-02	.3850	2.841	558.2
58	90.000	.92500	1060.0	.2620-01	.3270-01	.3740-01	.9247	.1908-02	.1335-02	.2510	1.775	560.7
58	90.000	.95300	1061.0	.3140-01	.3910-01	.4030-01	.9444	.2052-02	.1600-02	.3020	2.156	559.5
58	90.000	.96700	1062.0	.4530-01	.5670-01	.5840-01	.9444	.2976-02	.2307-02	.4270	3.058	563.4
58	90.000	.98000	1063.0	.4820-01	.6040-01	.6220-01	.9444	.3168-02	.2454-02	.4530	3.205	563.7
58	90.000	.99400	1064.0	.4930-01	.6210-01	.6400-01	.9444	.3260-02	.2515-02	.4580	3.244	566.4
58	135.00	.14300	1066.0	.1004	.1286	.1511	.9234	.7703-02	.5119-02	.8750	6.391	577.5
58	135.00	.20000	1068.0	.3990-01	.4910-01	.5600-01	.9234	.2854-02	.2033-02	.4050	3.003	549.1
58	135.00	.30000	1069.0	.3120-01	.3840-01	.4380-01	.9234	.2231-02	.1591-02	.3180	2.357	548.5
58	135.00	.50000	1070.0	.3480-01	.4290-01	.4890-01	.9234	.2491-02	.1776-02	.3550	2.586	548.6
58	135.00	.60000	1071.0	.3200-01	.3930-01	.4480-01	.9234	.2284-02	.1629-02	.3260	2.413	548.5
59	135.00	.70000	1072.0	.2300-01	.2850-01	.3260-01	.9234	.1663-02	.1170-02	.2260	1.699	555.1
59	135.00	.72400	1237.0	.4850-01	.6060-01	.6990-01	.9234	.3566-02	.2475-02	.4640	3.547	561.0
59	135.00	.74000	1243.0	.7770-01	.9910-01	.1163	.9234	.5928-02	.3960-02	.6850	5.230	575.7
59	135.00	.75000	1246.0	.9270-01	.1204	.1431	.9234	.7299-02	.4726-02	.7690	5.827	585.8
59	135.00	.77100	1252.0	.4960-01	.6180-01	.7120-01	.9234	.3631-02	.2527-02	.4770	3.623	559.8
58	135.00	.80000	1073.0	.4210-01	.5240-01	.6030-01	.9234	.3071-02	.2145-02	.4080	3.061	558.2
59	135.00	.93200	1259.0	.2030-01	.2540-01	.2940-01	.9234	.1500-02	.1033-02	.1900	1.386	564.2
60	135.00	.93900	1265.0	.1570-01	.1970-01	.2280-01	.9234	.1164-02	.8000-03	.1470	1.064	565.1
58	135.00	.95300	1074.0	.1880-01	.2370-01	.2500-01	.9404	.1274-02	.9589-03	.1730	1.224	568.0
58	135.00	.98000	1076.0	.4050-01	.5180-01	.5470-01	.9404	.2787-02	.2066-02	.3560	2.499	576.3
60	138.00	.95300	1266.0	.1590-01	.2010-01	.2130-01	.9399	.1085-02	.8123-03	.1450	1.022	569.4
60	138.00	.96700	1268.0	.2700-01	.3460-01	.3670-01	.9399	.1872-02	.1374-02	.2320	1.619	579.5
60	138.00	.98000	1270.0	.3850-01	.4930-01	.5230-01	.9399	.2665-02	.1964-02	.3350	2.325	577.7
60	138.00	.99400	1272.0	.3470-01	.4440-01	.4700-01	.9399	.2396-02	.1769-02	.3040	2.118	576.9
60	162.00	.95300	1267.0	.1890-01	.2430-01	.2640-01	.9357	.1344-02	.9657-03	.1650	1.190	577.5
60	162.00	.96700	1269.0	.2470-01	.3200-01	.3490-01	.9357	.1781-02	.1261-02	.2080	1.501	583.5
60	162.00	.98000	1271.0	.4050-01	.5230-01	.5700-01	.9357	.2904-02	.2066-02	.3450	2.480	581.6
58	180.00	.20000	1078.0	.2730-01	.3360-01	.3860-01	.9220	.1969-02	.1390-02	.2760	2.044	549.9
58	180.00	.40000	1079.0	.2920-01	.3620-01	.4180-01	.9220	.2130-02	.1488-02	.2880	2.053	554.8
58	180.00	.60000	1080.0	.3540-01	.4380-01	.5050-01	.9220	.2572-02	.1806-02	.3540	2.616	552.5
58	180.00	.70000	1081.0	.4080-01	.5080-01	.5880-01	.9220	.2999-02	.2082-02	.3970	3.010	557.6
59	180.00	.74000	1238.0	.9080-01	.1151	.1354	.9220	.6902-02	.4629-02	.8210	6.197	571.2
58	180.00	.75000	1082.0	.7250-01	.9150-01	.1074	.9220	.5472-02	.3693-02	.6630	5.211	568.9

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF

(RVZL19)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
59	180.00	.77100	1247.0	.5040-01	.6230-01	.7180-01	.9220	.3658-02	.2569-02	.5030	3.960	552.5
58	180.00	.80000	1083.0	.6990-01	.8810-01	.1031	.9220	.5252-02	.3564-02	.6470	4.831	566.9
59	180.00	.93200	1253.0	.2740-01	.3450-01	.4040-01	.9220	.2057-02	.1397-02	.2540	1.829	566.7
59	180.00	.93900	1260.0	.3250-01	.4090-01	.4790-01	.9220	.2444-02	.1656-02	.3000	2.145	567.4
58	180.00	.95300	1084.0	.1390-01	.1510-01	.1560-01	.9325	.7958-03	.7084-03	.3260	2.674	288.2
58	180.00	.96700	1085.0	.3980-01	.5080-01	.5620-01	.9325	.2866-02	.2028-02	.3510	2.472	575.6
58	180.00	.98000	1086.0	.4040-01	.5150-01	.5700-01	.9325	.2907-02	.2060-02	.3570	2.526	575.1
58	180.00	.99400	1087.0	.3820-01	.4880-01	.5410-01	.9325	.2757-02	.1944-02	.3330	2.342	577.0
60	198.00	.95300	1276.0	.4830-01	.6080-01	.6800-01	.9297	.3466-02	.2461-02	.4470	3.302	566.9
60	198.00	.96700	1280.0	.6680-01	.8510-01	.9580-01	.9297	.4883-02	.3403-02	.5910	4.290	574.9
60	198.00	.98000	1284.0	.6640-01	.8460-01	.9530-01	.9297	.4856-02	.3385-02	.5880	4.258	574.8
58	225.00	.11500	1088.0	.6690-01	.8390-01	.9780-01	.9220	.4983-02	.3412-02	.6320	4.646	563.3
58	225.00	.17700	1090.0	.1580-01	.1920-01	.2180-01	.9220	.1113-02	.8078-03	.1720	1.284	535.4
58	225.00	.60000	1091.0	.4540-01	.5610-01	.6460-01	.9220	.3293-02	.2315-02	.4550	3.366	551.9
58	225.00	.70000	1092.0	.4400-01	.5440-01	.6270-01	.9220	.3198-02	.2241-02	.4370	3.264	553.3
59	225.00	.72400	1233.0	.5130-01	.6360-01	.7350-01	.9220	.3749-02	.2614-02	.5040	3.865	555.6
59	225.00	.74000	1239.0	.4180-01	.5180-01	.5970-01	.9220	.3044-02	.2133-02	.4160	3.202	553.5
59	225.00	.75000	1244.0	.6560-01	.8290-01	.9720-01	.9220	.4958-02	.3345-02	.6000	4.616	569.1
59	225.00	.77100	1248.0	.5600-01	.6960-01	.8070-01	.9220	.4114-02	.2853-02	.5430	4.187	558.1
58	225.00	.80000	1093.0	.4310-01	.5350-01	.6190-01	.9220	.3157-02	.2194-02	.4200	3.099	557.0
59	225.00	.93200	1254.0	.5690-01	.7170-01	.8390-01	.9220	.4278-02	.2902-02	.5270	3.757	566.9
59	225.00	.93900	1261.0	.8050-01	.1017	.1194	.9220	.6089-02	.4104-02	.7350	5.198	569.4
60	238.00	.95300	1277.0	.9200-01	.1169	.1344	.9258	.6852-02	.4691-02	.8260	6.024	572.5
60	238.00	.96700	1281.0	.1102	.1434	.1679	.9258	.8557-02	.5614-02	.9070	6.678	587.0
60	238.00	.98000	1285.0	.1029	.1335	.1560	.9258	.7951-02	.5243-02	.8550	6.300	585.5
60	238.00	.99400	1289.0	.7040-01	.8600-01	.9640-01	.9258	.4911-02	.3586-02	.7380	5.448	542.7
58	256.00	.11500	1094.0	.5900-01	.7330-01	.8490-01	.9220	.4328-02	.3004-02	.5730	4.230	557.6
58	256.00	.12800	1095.0	.3020-01	.3680-01	.4200-01	.9220	.2138-02	.1542-02	.3220	2.400	539.3
58	256.00	.14600	1096.0	.2220-01	.2700-01	.3070-01	.9220	.1563-02	.1130-02	.2390	1.778	537.4
59	256.00	.20000	1097.0	.1740-01	.2110-01	.2400-01	.9220	.1222-02	.8894-03	.1910	1.423	534.2
59	256.00	.40000	1098.0	.2430-01	.2990-01	.3430-01	.9220	.1750-02	.1240-02	.2480	1.754	548.1
59	256.00	.60000	1099.0	.5110-01	.6340-01	.7320-01	.9220	.3731-02	.2607-02	.5050	3.707	554.7
59	256.00	.80000	1100.0	.4850-01	.6030-01	.6980-01	.9220	.3560-02	.2472-02	.4720	3.483	557.5
59	256.00	.87500	1101.0	.5960-01	.7570-01	.8920-01	.9220	.4549-02	.3040-02	.5350	3.731	572.5
59	270.00	.50000-01	1102.0	.9360-01	.1183	.1366	.9246	.6963-02	.4774-02	.8570	6.288	568.9
59	270.00	.10000+00	1103.0	.8790-01	.1104	.1269	.9246	.6469-02	.4480-02	.8220	6.043	565.0
59	270.00	.11500	1104.0	.4980-01	.6190-01	.7160-01	.9220	.3652-02	.2537-02	.4850	3.580	557.2
59	270.00	.14600	1105.0	.2880-01	.3510-01	.4010-01	.9220	.2042-02	.1469-02	.3060	2.273	540.5
59	270.00	.72400	1234.0	.3960-01	.4830-01	.5520-01	.9220	.2815-02	.2018-02	.4160	3.105	542.2
59	270.00	.74000	1240.0	.5940-01	.7310-01	.8390-01	.9220	.4278-02	.3028-02	.6050	4.513	548.7
59	270.00	.77100	1249.0	.5530-01	.6810-01	.7820-01	.9220	.3988-02	.2820-02	.5620	4.366	549.2
59	270.00	.93200	1255.0	.5550-01	.6870-01	.7940-01	.9220	.4047-02	.2829-02	.5490	3.960	554.6
59	270.00	.93900	1262.0	.7270-01	.9070-01	.1054	.9220	.5374-02	.3705-02	.6960	5.079	560.5

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, LEFT SRB

(RVZL19)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HI/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
59	270.00	.95300	1110.0	.7780-01	.9740-01	.1115	.9250	.5684-02	.3969-02	.7390	5.226	562.4
59	270.00	.96700	1111.0	.9060-01	.1155	.1341	.9250	.6836-02	.4617-02	.7990	5.651	575.5
59	270.00	.98000	1112.0	.9090-01	.1160	.1345	.9250	.6858-02	.4637-02	.8040	5.655	575.1
59	270.00	.99400	1113.0	.8320-01	.1059	.1226	.9250	.6250-02	.4243-02	.7420	5.254	573.6
59	284.00	.11500	1114.0	.5490-01	.6830-01	.7920-01	.9220	.4038-02	.2799-02	.5320	3.925	558.3
59	284.00	.12800	1115.0	.2680-01	.3260-01	.3720-01	.9220	.1897-02	.1365-02	.2840	2.117	540.2
59	284.00	.14600	1116.0	.2290-01	.2790-01	.3180-01	.9220	.1621-02	.1168-02	.2440	1.817	539.6
59	284.00	.20000	1117.0	.1990-01	.2430-01	.2760-01	.9220	.1407-02	.1017-02	.2140	1.596	537.9
59	284.00	.40000	1118.0	.2980-01	.3660-01	.4190-01	.9220	.2136-02	.1520-02	.3080	2.180	546.2
59	284.00	.80000	1120.0	.4340-01	.5370-01	.6200-01	.9220	.3162-02	.2212-02	.4290	3.226	554.3
59	284.00	.87500	1121.0	.8340-01	.1050	.1228	.9220	.6261-02	.4250-02	.7730	5.454	566.7
60	302.00	.98000	1282.0	.5670-01	.7170-01	.8220-01	.9258	.4189-02	.2889-02	.5170	3.800	569.6
60	302.00	.99400	1286.0	.4440-01	.5640-01	.6480-01	.9258	.3305-02	.2263-02	.3990	2.789	572.3
59	315.00	.92500	1122.0	.6540-01	.8170-01	.9480-01	.9220	.4835-02	.3336-02	.6280	4.629	560.2
59	315.00	.93900	1124.0	.1060-01	.1290-01	.1460-01	.9220	.7440-03	.5402-03	.1150	.8590	535.4
59	315.00	.95300	1125.0	.1430-01	.1730-01	.1970-01	.9220	.1004-02	.7278-03	.1540	1.150	536.5
59	315.00	.96700	1126.0	.2030-01	.2470-01	.2820-01	.9220	.1438-02	.1034-02	.2150	1.598	540.8
59	315.00	.98000	1127.0	.2480-01	.3040-01	.3500-01	.9220	.1782-02	.1262-02	.2520	1.839	548.5
59	315.00	.99400	1128.0	.2310-01	.2840-01	.3260-01	.9220	.1661-02	.1180-02	.2380	1.751	547.0
59	315.00	.70000	1129.0	.2620-01	.3250-01	.3760-01	.9220	.1916-02	.1337-02	.2580	1.921	555.2
59	315.00	.72400	1235.0	.6500-01	.8100-01	.9410-01	.9220	.4796-02	.3314-02	.6260	4.706	559.6
59	315.00	.74000	1241.0	.7020-01	.8800-01	.1025	.9220	.5224-02	.3580-02	.6640	5.036	563.0
59	315.00	.75000	1245.0	.5730-01	.7190-01	.8390-01	.9220	.4277-02	.2919-02	.5370	4.095	564.6
59	315.00	.77100	1250.0	.1880-01	.2290-01	.2620-01	.9220	.1334-02	.9571-03	.1980	1.570	541.8
59	315.00	.80000	1130.0	.3390-01	.4200-01	.4850-01	.9220	.2475-02	.1727-02	.3340	2.505	555.3
59	315.00	.87500	1131.0	.5080-01	.6370-01	.7430-01	.9220	.3790-02	.2591-02	.4780	3.370	564.0
59	315.00	1265.0	1132.0	.4780-01	.5970-01	.6930-01	.9220	.3535-02	.2437-02	.4580	3.243	560.6
60	315.00	1074.0	1256.0	.5320-01	.6640-01	.7710-01	.9220	.3931-02	.2711-02	.5100	3.611	560.4
59	315.00	1075.0	1263.0	.5470-01	.6830-01	.7920-01	.9220	.4039-02	.2789-02	.5260	3.787	559.9
59	315.00	1076.0	1133.0	.4550-01	.5670-01	.6400-01	.9267	.3264-02	.2320-02	.4400	3.109	558.8
59	315.00	1077.0	1134.0	.5020-01	.6330-01	.7200-01	.9267	.3672-02	.2559-02	.4630	3.303	567.4
59	315.00	1057.0	1135.0	.4270-01	.5390-01	.6140-01	.9267	.3131-02	.2179-02	.3930	2.776	568.0
59	315.00	1058.0	1136.0	.3620-01	.4580-01	.5230-01	.9267	.2668-02	.1845-02	.3290	2.293	570.5
59	330.00	.72400	1236.0	.9980-01	.1276	.1512	.9220	.7709-02	.5089-02	.8740	6.676	576.7
59	335.00	.43000-01	1212.0	.1226	.1565	.1780	.9282	.9076-02	.6249-02	1.079	7.885	575.9
59	335.00	.50000-01	1213.0	.1098	.1396	.1583	.9282	.8073-02	.5598-02	.9820	7.186	573.1
59	335.00	.57000-01	1214.0	.1043	.1323	.1499	.9282	.7641-02	.5318-02	.9410	6.890	571.6
59	335.00	.63000-01	1215.0	.9090-01	.1149	.1300	.9282	.6627-02	.4634-02	.8290	6.074	569.7
59	335.00	.90000-01	1216.0	.8870-01	.1129	.1281	.9282	.6532-02	.4524-02	.7920	5.791	573.6
59	335.00	.10000+00	1217.0	.1154	.1476	.1682	.9282	.8575-02	.5884-02	1.008	7.366	577.1
60	342.00	.95300	1275.0	.4620-01	.5770-01	.6420-01	.9296	.3274-02	.2355-02	.4420	3.059	560.9
60	342.00	.96700	1279.0	.4120-01	.5180-01	.5790-01	.9296	.2950-02	.2099-02	.3830	2.707	565.9
60	342.00	.98000	1283.0	.4590-01	.5780-01	.6460-01	.9296	.3293-02	.2340-02	.4250	2.946	566.7

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF (RVZL19)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
60	342.00	.99400	1287.0	.4550-01	.5740-01	.6430-01	.9296	.3277-02	.2317-02	.4160	2.881	568.8
58	355.00	.95300	1016.0	.4540-01	.5660-01	.6230-01	.9316	.3173-02	.2314-02	.4370	3.109	559.4
58	355.00	.96700	1017.0	.5980-01	.7510-01	.8300-01	.9316	.4230-02	.3047-02	.5580	3.977	565.4
58	355.00	.98000	1018.0	.6620-01	.8330-01	.9210-01	.9316	.4693-02	.3373-02	.6140	4.350	566.4

PARAMETRIC DATA

ALPHA = 5.000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
67	5.000	-9.100	4.020	72.10	749.0	176.9	.4630	5.234	2620.	.2194-03	.1424-06	4.037
68	5.020	-9.100	4.020	72.20	749.0	176.9	.4630	5.236	2620.	.2196-03	.1424-06	4.039
69	5.030	-9.100	4.020	72.30	749.0	177.0	.4640	5.244	2621.	.2197-03	.1425-06	4.041

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
67	.5095-01	.1144-01
68	.5096-01	.1144-01
69	.5100-01	.1144-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
67	.00000	.11500	1000.0	.1242	.1596	.1900	.9220	.9680-02	.6328-02	1.067	7.783	580.0
67	.00000	.20000	1001.0	.5440-01	.6780-01	.7870-01	.9220	.4008-02	.2771-02	.5240	3.864	559.4
67	.00000	.25000	1003.0	.6080-01	.7640-01	.8910-01	.9220	.4540-02	.3100-02	.5710	4.193	564.6
67	.00000	.30000	1004.0	.6520-01	.8180-01	.9550-01	.9220	.4864-02	.3320-02	.6110	4.489	564.7
67	.00000	.50000	1006.0	.5750-01	.7220-01	.8420-01	.9220	.4289-02	.2931-02	.5410	3.923	564.2
67	.00000	.55000	1007.0	.4750-01	.5970-01	.6970-01	.9220	.3551-02	.2420-02	.4440	3.218	565.3
67	.00000	.60000	1008.0	.4380-01	.5500-01	.6420-01	.9220	.3273-02	.2231-02	.4090	3.005	565.3
67	.00000	.65000	1009.0	.4260-01	.5390-01	.6330-01	.9220	.3225-02	.2172-02	.3890	2.831	569.7
67	.00000	.70000	1010.0	.3610-01	.4600-01	.5440-01	.9220	.2770-02	.1841-02	.3200	2.423	574.7
68	.00000	.72400	1232.0	.7460-01	.9650-01	.1155	.9220	.5887-02	.3801-02	.6260	4.701	583.8
68	.00000	.74000	1242.0	.7300-01	.9420-01	.1125	.9220	.5732-02	.3722-02	.6200	4.754	582.0
67	.00000	.75000	1011.0	.6620-01	.8620-01	.1037	.9220	.5283-02	.3374-02	.5450	4.247	587.0
68	.00000	.77100	1251.0	.4680-01	.5850-01	.6790-01	.9220	.3462-02	.2383-02	.4470	3.498	561.2
67	.00000	.80000	1012.0	.4780-01	.6170-01	.7370-01	.9220	.3754-02	.2436-02	.4050	3.053	582.4
67	.00000	.87500	1013.0	.8290-01	.1090	.1323	.9220	.6741-02	.4224-02	.6600	4.589	592.3
68	.00000	.93200	1257.0	.2137	.2798	.3383	.9220	.1724-01	.1089-01	1.727	11.98	590.0
68	4.3800	.96500	1220.0	.4463	.6244	.7632	.9272	.3889-01	.2274-01	2.985	21.74	617.3
68	4.3800	.97500	1221.0	.3032	.4366	.5462	.9272	.2783-01	.1545-01	1.893	13.68	626.1

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF (RVZL20)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
68	4.3800	.98500	1222.0	.3081	.4257	.5152	.9272	.2625-01	.1570-01	2.129	15.33	613.0
68	4.3800	.99500	1223.0	.2662	.3605	.4299	.9272	.2190-01	.1357-01	1.942	13.99	605.4
68	5.0000	.50000-01	1209.0	.7820-01	.9580-01	.1070	.9266	.5452-02	.3984-02	.8130	6.073	544.6
68	5.0000	.90000-01	1210.0	.1708	.2215	.2572	.9266	.1310-01	.8704-02	1.424	10.36	585.0
68	5.0000	10.000	1211.0	.1933	.2501	.2899	.9266	.1477-01	.9849-02	1.623	11.81	583.8
68	20.000	.96500	1224.0	.3683	.5073	.6212	.9257	.3166-01	.1877-01	2.564	18.41	612.0
68	20.000	.97500	1225.0	.2738	.3819	.4725	.9257	.2408-01	.1395-01	1.845	13.22	616.3
68	20.000	.98500	1226.0	.2353	.3241	.3970	.9257	.2023-01	.1199-01	1.637	11.83	612.0
68	35.000	10.000	1208.0	.1355	.1735	.2024	.9244	.1032-01	.6907-02	1.182	8.634	577.4
68	40.000	.96500	1228.0	.1339	.1709	.1988	.9246	.1013-01	.6824-02	1.180	8.681	575.7
68	40.000	.97500	1229.0	.1341	.1717	.2001	.9246	.1020-01	.6835-02	1.170	8.604	577.3
68	40.000	.99500	1231.0	.1396	.1798	.2105	.9246	.1073-01	.7114-02	1.192	8.691	581.0
67	45.000	.11500	1020.0	.9200-01	.1167	.1374	.9220	.7001-02	.4688-02	.8290	6.068	571.9
67	45.000	.14300	1021.0	.7380-01	.9240-01	.1076	.9220	.5480-02	.3761-02	.7000	5.149	562.6
67	45.000	.17100	1022.0	.5290-01	.6580-01	.7630-01	.9220	.3886-02	.2693-02	.5120	3.775	558.5
67	45.000	.20000	1023.0	.3700-01	.4560-01	.5250-01	.9220	.2673-02	.1883-02	.3720	2.755	551.0
67	45.000	.30000	1024.0	.2300-01	.2880-01	.3350-01	.9220	.1706-02	.1173-02	.2190	1.612	561.9
67	45.000	.55000	1027.0	.6450-01	.8110-01	.9460-01	.9220	.4820-02	.3288-02	.6040	4.410	564.9
67	45.000	.70000	1030.0	.6670-01	.8770-01	.1065	.9220	.5424-02	.3399-02	.5320	3.919	592.3
67	45.000	.80000	1031.0	.7290-01	.9300-01	.1100	.9220	.5605-02	.3714-02	.6430	4.780	575.5
67	45.000	.87500	1032.0	.3000-01	.3850-01	.4580-01	.9220	.2335-02	.1526-02	.2570	1.806	580.0
67	45.000	.92500	1033.0	.3970-01	.5020-01	.5880-01	.9220	.2996-02	.2025-02	.3650	2.563	568.6
68	45.000	.93200	1258.0	.5560-01	.6960-01	.8100-01	.9220	.4125-02	.2835-02	.5290	3.856	561.9
69	45.000	.93900	1264.0	.6670-01	.8390-01	.9800-01	.9220	.4999-02	.3400-02	.6210	4.501	566.4
67	50.000	.95300	1034.0	.7460-01	.9440-01	.1092	.9243	.5561-02	.3803-02	.6810	4.816	569.6
67	50.000	.96700	1035.0	.8620-01	.1106	.1293	.9243	.6588-02	.4393-02	.7470	5.293	578.6
67	50.000	.98000	1036.0	.9890-01	.1275	.1497	.9243	.7625-02	.5037-02	.8410	5.870	581.8
68	65.000	.43000-01	1200.0	.2658	.3558	.4322	.9239	.2202-01	.1354-01	2.004	14.47	600.6
68	65.000	.50000-01	1201.0	.2221	.2905	.3462	.9239	.1764-01	.1132-01	1.799	13.06	589.6
68	65.000	.57000-01	1202.0	.1990	.2580	.3053	.9239	.1556-01	.1014-01	1.660	12.08	584.8
68	65.000	.63000-01	1203.0	.1663	.2151	.2540	.9239	.1294-01	.8473-02	1.398	10.18	583.6
68	65.000	.90000-01	1204.0	.1247	.1609	.1897	.9239	.9666-02	.6356-02	1.057	7.703	582.2
68	65.000	.10000+00	1205.0	.1549	.1997	.2353	.9239	.1199-01	.7891-02	1.315	9.583	581.9
69	76.000	.12000	1290.0	.1438	.1852	.2208	.9220	.1126-01	.7333-02	1.229	8.721	581.5
69	76.000	.12700	1291.0	.1437	.1867	.2242	.9220	.1143-01	.7330-02	1.193	8.532	586.3
69	76.000	.13400	1292.0	.1580	.2090	.2552	.9220	.1301-01	.8055-02	1.235	8.736	595.7
69	76.000	.17300	1293.0	.6720-01	.8450-01	.9880-01	.9220	.5037-02	.3426-02	.6260	4.563	566.5
69	76.000	.18000	1294.0	.6450-01	.8060-01	.9370-01	.9220	.4778-02	.3290-02	.6180	4.472	561.4
69	76.000	.18600	1295.0	.5270-01	.6560-01	.7600-01	.9220	.3875-02	.2687-02	.5120	3.749	558.5
69	76.000	.19300	1296.0	.3990-01	.4950-01	.5730-01	.9220	.2922-02	.2035-02	.3910	2.879	556.7
69	76.000	.20000	1297.0	.2850-01	.3540-01	.4100-01	.9220	.2090-02	.1454-02	.2790	2.044	557.2
67	90.000	.20000-02	1039.0	.4602	.6833	.6405	.9569	.3263-01	.2345-01	2.689	18.79	634.0
67	90.000	.10000+00	1042.0	.2635	.3509	.4222	.9245	.2151-01	.1343-01	2.018	14.59	598.3

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF (RVZL20)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
67	90.000	.13400	1045.0	.3055	.5255	.8806	.9220	.4486-01	.1556-01	1.392	9.765	659.3
67	90.000	.17300	1046.0	.9960-01	.1284	.1532	.9220	.7807-02	.5073-02	.8460	6.163	581.9
67	90.000	.18000	1047.0	.8930-01	.1124	.1314	.9220	.6695-02	.4551-02	.8300	6.092	566.4
67	90.000	.18600	1048.0	.6390-01	.8100-01	.9530-01	.9220	.4855-02	.3254-02	.5760	4.221	571.5
67	90.000	.19300	1049.0	.5360-01	.6740-01	.7870-01	.9220	.4007-02	.2731-02	.5010	3.681	565.3
67	90.000	.20000	1050.0	.4160-01	.5200-01	.6040-01	.9220	.3075-02	.2119-02	.3980	2.933	560.8
67	90.000	.25000	1051.0	.3280-01	.4100-01	.4770-01	.9220	.2432-02	.1669-02	.3110	2.287	562.5
67	90.000	.30000	1052.0	.3490-01	.4380-01	.5120-01	.9220	.2610-02	.1777-02	.3250	2.388	565.7
67	90.000	.50000	1054.0	.7640-01	.9620-01	.1125	.9220	.5732-02	.3894-02	.7090	5.121	566.6
67	90.000	.60000	1055.0	.8970-01	.1141	.1345	.9220	.6855-02	.4569-02	.8000	5.815	573.6
67	90.000	.75000	1057.0	.1485	.2374	.3570	.9220	.1819-01	.7564-02	.7560	5.614	648.7
67	90.000	.80000	1058.0	.3310-01	.4150-01	.4840-01	.9220	.2464-02	.1687-02	.3120	2.297	563.5
67	90.000	.92500	1060.0	.2900-01	.3680-01	.4320-01	.9220	.2202-02	.1480-02	.2630	1.856	570.7
67	90.000	.95300	1061.0	.5230-01	.6650-01	.7710-01	.9249	.3926-02	.2662-02	.4650	3.291	574.1
67	90.000	.96700	1062.0	.4770-01	.6100-01	.7090-01	.9249	.3613-02	.2431-02	.4170	2.969	577.0
67	90.000	.98000	1063.0	.4470-01	.5720-01	.6670-01	.9249	.3396-02	.2275-02	.3880	2.720	578.3
67	90.000	.99400	1064.0	.5230-01	.6740-01	.7880-01	.9249	.4015-02	.2665-02	.4460	3.133	581.5
67	135.00	.14300	1066.0	.1415	.1841	.2215	.9220	.1129-01	.7208-02	1.165	8.464	587.1
67	135.00	.20000	1068.0	.1189	.1535	.1834	.9220	.9345-02	.6055-02	1.005	7.316	582.8
67	135.00	.30000	1069.0	.7210-01	.9080-01	.1062	.9220	.5408-02	.3675-02	.6700	4.917	566.5
67	135.00	.50000	1070.0	.8460-01	.1072	.1260	.9220	.6417-02	.4310-02	.7670	5.525	570.8
67	135.00	.60000	1071.0	.7800-01	.9920-01	.1169	.9220	.5958-02	.3975-02	.6980	5.106	573.2
67	135.00	.70000	1072.0	.6650-01	.8620-01	.1033	.9220	.5260-02	.3390-02	.5570	4.121	584.4
68	135.00	.72400	1237.0	.8270-01	.1070	.1282	.9220	.6533-02	.4212-02	.6920	5.230	584.2
68	135.00	.74000	1243.0	.1372	.1868	.2343	.9220	.1194-01	.6991-02	.9850	7.409	607.6
68	135.00	.75000	1246.0	.1355	.1973	.2649	.9220	.1350-01	.6905-02	.8260	6.123	629.0
68	135.00	.77100	1252.0	.1760	.2349	.2891	.9220	.1473-01	.8968-02	1.339	9.970	599.3
67	135.00	.80000	1073.0	.6010-01	.7850-01	.9470-01	.9220	.4823-02	.3063-02	.4900	3.620	588.6
68	135.00	.93200	1259.0	.4830-01	.5970-01	.6890-01	.9220	.3510-02	.2460-02	.4800	3.514	553.3
69	135.00	.93900	1265.0	.5450-01	.6750-01	.7790-01	.9220	.3972-02	.2781-02	.5420	3.949	554.3
67	135.00	.95300	1074.0	.4960-01	.6210-01	.6930-01	.9295	.3533-02	.2526-02	.4680	3.317	563.5
67	135.00	.98000	1076.0	.5840-01	.7510-01	.8520-01	.9295	.4341-02	.2973-02	.4980	3.492	581.1
69	138.00	.95300	1266.0	.6280-01	.7810-01	.8650-01	.9300	.4412-02	.3204-02	.6140	4.337	557.5
69	138.00	.96700	1268.0	.7460-01	.9610-01	.1086	.9300	.5537-02	.3806-02	.6390	4.448	581.3
69	138.00	.98000	1270.0	.7130-01	.9180-01	.1037	.9300	.5291-02	.3635-02	.6100	4.217	581.4
69	138.00	.99400	1272.0	.5280-01	.6730-01	.7560-01	.9300	.3858-02	.2692-02	.4670	3.264	575.4
69	162.00	.95300	1267.0	.8950-01	.1137	.1242	.9345	.6331-02	.4562-02	.8010	5.786	573.5
69	162.00	.96700	1269.0	.7190-01	.9560-01	.1064	.9345	.5427-02	.3666-02	.5540	3.969	597.8
69	162.00	.98000	1271.0	.8470-01	.1144	.1283	.9345	.6542-02	.4320-02	.6240	4.439	604.6
67	180.00	.20000	1078.0	.9430-01	.1196	.1399	.9228	.7128-02	.4807-02	.8530	6.248	571.2
67	180.00	.40000	1079.0	.8620-01	.1098	.1290	.9228	.6571-02	.4389-02	.7640	5.391	574.6
67	180.00	.60000	1080.0	.6530-01	.8360-01	.9870-01	.9228	.5029-02	.3327-02	.5680	4.146	578.0
67	180.00	.70000	1081.0	.6580-01	.8490-01	.1009	.9228	.5138-02	.3350-02	.5560	4.163	582.6

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF (RVZL20)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
68	180.00	.74000	1238.0	.1338	.1784	.2180	.9228	.1111-01	.6818-02	1.020	7.598	599.0
67	180.00	.75000	1082.0	.8230-01	.1104	.1354	.9228	.6899-02	.4195-02	.6190	4.784	601.2
68	180.00	.77100	1247.0	.9390-01	.1216	.1448	.9228	.7379-02	.4784-02	.7860	6.085	584.3
67	180.00	.80000	1083.0	.8440-01	.1127	.1378	.9228	.7019-02	.4298-02	.6410	4.708	599.6
68	180.00	.93200	1253.0	.6440-01	.8250-01	.9730-01	.9228	.4957-02	.3282-02	.5610	4.019	577.5
68	180.00	.93900	1260.0	.5690-01	.7340-01	.8730-01	.9228	.4447-02	.2897-02	.4800	3.406	582.8
67	180.00	.96700	1085.0	.5370-01	.7300-01	.7970-01	.9383	.4058-02	.2736-02	.3880	2.693	606.9
67	180.00	.98000	1086.0	.6800-01	.9290-01	.1015	.9383	.5173-02	.3465-02	.4850	3.372	608.8
67	180.00	.99400	1087.0	.5550-01	.7660-01	.8420-01	.9383	.4287-02	.2826-02	.3830	2.642	613.2
69	198.00	.95300	1276.0	.1481	.1971	.2081	.9419	.1062-01	.7552-02	1.138	8.279	598.4
69	198.00	.96700	1280.0	.7260-01	.1026	.1100	.9419	.5608-02	.3701-02	.4730	3.362	621.1
69	198.00	.98000	1284.0	.6070-01	.8650-01	.9290-01	.9419	.4740-02	.3094-02	.3870	2.739	623.8
67	225.00	.11500	1088.0	.1630	.2158	.2572	.9252	.1310-01	.8304-02	1.270	9.191	595.7
67	225.00	.17700	1090.0	.9990-01	.1273	.1475	.9252	.7512-02	.5090-02	.8840	6.467	574.9
67	225.00	.60000	1091.0	.7320-01	.9670-01	.1151	.9252	.5861-02	.3728-02	.5740	4.154	594.8
67	225.00	.70000	1092.0	.6200-01	.8210-01	.9790-01	.9252	.4986-02	.3161-02	.4840	3.536	595.6
68	225.00	.72400	1233.0	.9060-01	.1204	.1437	.9252	.7324-02	.4619-02	.7000	5.257	597.0
68	225.00	.74000	1239.0	.6700-01	.8850-01	.1052	.9252	.5360-02	.3414-02	.5270	3.972	594.3
68	225.00	.75000	1244.0	.8540-01	.1196	.1493	.9252	.7608-02	.4352-02	.5690	4.274	617.8
68	225.00	.77100	1248.0	.7620-01	.1009	.1202	.9252	.6125-02	.3882-02	.5940	4.491	595.6
67	225.00	.80000	1093.0	.6300-01	.8380-01	.1002	.9252	.5106-02	.3210-02	.4840	3.501	597.8
68	225.00	.93200	1254.0	.8040-01	.1077	.1296	.9252	.6604-02	.4095-02	.6030	4.228	601.2
68	225.00	.93900	1261.0	.3210-01	.4450-01	.5500-01	.9252	.2803-02	.1637-02	.2200	1.525	614.0
69	238.00	.95300	1277.0	.1955	.2712	.2792	.9463	.1424-01	.9968-02	1.337	9.551	615.0
69	238.00	.96700	1281.0	.9650-01	.1445	.1500	.9463	.7652-02	.4924-02	.5550	3.994	636.3
69	238.00	.98000	1285.0	.1304	.1915	.1984	.9463	.1012-01	.6648-02	.7800	5.619	631.8
67	256.00	.11500	1094.0	.1406	.1840	.2173	.9252	.1107-01	.7163-02	1.136	8.244	590.1
67	256.00	.12800	1095.0	.6690-01	.8340-01	.9510-01	.9252	.4846-02	.3407-02	.6420	4.732	560.1
67	256.00	.14600	1096.0	.7130-01	.8970-01	.1028	.9252	.5238-02	.3635-02	.6650	4.883	565.8
68	256.00	.20000	1097.0	.7930-01	.9790-01	.1108	.9253	.5645-02	.4041-02	.7960	5.889	551.6
68	256.00	.40000	1098.0	.6710-01	.8410-01	.9620-01	.9253	.4904-02	.3417-02	.6310	4.415	564.0
68	256.00	.60000	1099.0	.4220-01	.5440-01	.6340-01	.9253	.3233-02	.2153-02	.3600	2.610	581.1
68	256.00	.80000	1100.0	.4880-01	.6390-01	.7560-01	.9253	.3851-02	.2485-02	.3920	2.844	590.8
68	270.00	.50000-01	1102.0	.2647	.3540	.3707	.9433	.1889-01	.1349-01	2.001	14.45	600.2
68	270.00	.10000+00	1103.0	.2448	.3231	.3375	.9433	.1720-01	.1247-01	1.926	13.95	594.1
68	270.00	.11500	1104.0	.1345	.1743	.2050	.9247	.1045-01	.6853-02	1.123	8.172	584.7
68	270.00	.14600	1105.0	.9520-01	.1190	.1362	.9247	.6938-02	.4851-02	.9090	6.692	561.2
68	270.00	.72400	1234.0	.7980-01	.9880-01	.1123	.9247	.5725-02	.4066-02	.7910	5.863	554.0
68	270.00	.74000	1240.0	.1050	.1310	.1499	.9247	.7637-02	.5348-02	1.006	7.458	560.5
68	270.00	.77100	1249.0	.8650-01	.1091	.1257	.9247	.6405-02	.4408-02	.7970	6.134	567.8
68	270.00	.93200	1255.0	.1519	.1929	.2235	.9247	.1139-01	.7739-02	1.362	9.743	572.6
68	270.00	.93900	1262.0	.1349	.1758	.2076	.9247	.1058-01	.6872-02	1.106	7.955	587.7
68	270.00	.95300	1110.0	.1437	.1901	.1974	.9443	.1006-01	.7323-02	1.123	7.814	595.2

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF

(RVZL20)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
68	270.00	.96700	1111.0	.9960-01	.1394	.1460	.9443	.7439-02	.5075-02	.6660	4.615	617.4
68	270.00	.98000	1112.0	.1125	.1578	.1654	.9443	.8427-02	.5733-02	.7480	5.147	618.1
68	270.00	.99400	1113.0	.1443	.2017	.2113	.9443	.1077-01	.7354-02	.9670	6.704	617.0
68	284.00	.11500	1114.0	.1395	.1804	.2131	.9239	.1086-01	.7108-02	1.173	8.537	583.6
68	284.00	.12800	1115.0	.6390-01	.7910-01	.9030-01	.9239	.4603-02	.3255-02	.6330	4.675	554.1
68	284.00	.14600	1116.0	.8030-01	.1005	.1157	.9239	.5896-02	.4094-02	.7630	5.613	562.2
68	284.00	.20000	1117.0	.7260-01	.9080-01	.1045	.9239	.5322-02	.3700-02	.6910	5.087	561.7
68	284.00	.40000	1118.0	.4780-01	.5920-01	.6760-01	.9239	.3443-02	.2435-02	.4740	3.345	554.0
68	284.00	.80000	1120.0	.2970-01	.3820-01	.4500-01	.9239	.2294-02	.1512-02	.2530	1.873	581.4
68	284.00	.87500	1121.0	.3440-01	.4520-01	.5410-01	.9239	.2757-02	.1755-02	.2750	1.920	591.7
69	302.00	.98000	1282.0	.1451	.2047	.2260	.9385	.1152-01	.7402-02	.9530	6.840	620.3
69	302.00	.99400	1286.0	.9450-01	.1363	.1518	.9385	.7740-02	.4818-02	.5880	4.004	627.0
68	315.00	.92500	1122.0	.1252	.1602	.1896	.9223	.9662-02	.6380-02	1.093	7.980	577.3
68	315.00	.93900	1124.0	.6330-01	.7840-01	.9030-01	.9223	.4604-02	.3225-02	.6260	4.628	554.3
68	315.00	.95300	1125.0	.7170-01	.8900-01	.1029	.9223	.5242-02	.3652-02	.7000	5.167	556.8
68	315.00	.96700	1126.0	.9080-01	.1136	.1320	.9223	.6726-02	.4627-02	.8620	6.344	562.2
68	315.00	.98000	1127.0	.4790-01	.5990-01	.6940-01	.9223	.3538-02	.2442-02	.4590	3.322	560.8
68	315.00	.99400	1128.0	.6110-01	.7640-01	.8870-01	.9223	.4519-02	.3115-02	.5830	4.266	561.3
68	315.00	.70000	1129.0	.4980-01	.6290-01	.7350-01	.9223	.3745-02	.2540-02	.4590	3.392	567.8
68	315.00	.72400	1235.0	.9310-01	.1183	.1391	.9223	.7089-02	.4745-02	.8350	6.237	572.6
68	315.00	.74000	1241.0	.9500-01	.1218	.1444	.9223	.7359-02	.4839-02	.8220	6.186	578.7
68	315.00	.75000	1245.0	.4060-01	.5240-01	.6240-01	.9223	.3179-02	.2069-02	.3440	2.605	582.0
68	315.00	.77100	1250.0	.8050-01	.1005	.1165	.9223	.5937-02	.4102-02	.7720	6.073	560.3
68	315.00	.80000	1130.0	.8800-01	.1121	.1322	.9223	.6735-02	.4483-02	.7800	5.799	574.6
68	315.00	.87500	1131.0	.6330-01	.8260-01	.9930-01	.9223	.5062-02	.3225-02	.5170	3.598	588.3
68	315.00	1265.0	1132.0	.1122	.1438	.1705	.9223	.8688-02	.5716-02	.9720	6.820	578.5
68	315.00	1074.0	1256.0	.1202	.1551	.1849	.9223	.9420-02	.6127-02	1.019	7.141	582.2
69	315.00	1075.0	1263.0	.1454	.1884	.2253	.9223	.1149-01	.7416-02	1.218	8.657	584.9
68	315.00	1076.0	1133.0	.1587	.2057	.2248	.9357	.1145-01	.8087-02	1.324	9.233	584.8
68	315.00	1077.0	1134.0	.1493	.2055	.2302	.9357	.1173-01	.7605-02	1.040	7.253	611.7
68	315.00	1057.0	1135.0	.1594	.2273	.2587	.9357	.1318-01	.8122-02	1.018	6.989	623.2
68	315.00	1058.0	1136.0	.1108	.1603	.1838	.9357	.9366-02	.5646-02	.6840	4.643	627.4
68	330.00	.72400	1236.0	.7220-01	.9220-01	.1092	.9220	.5562-02	.3679-02	.6340	4.845	576.1
68	335.00	.43000-01	1212.0	.2531	.3339	.3799	.9310	.1936-01	.1290-01	1.996	14.46	593.8
68	335.00	.50000-01	1213.0	.2272	.2983	.3386	.9310	.1725-01	.1158-01	1.817	13.17	591.6
68	335.00	.57000-01	1214.0	.2150	.2805	.3171	.9310	.1616-01	.1096-01	1.758	12.77	588.1
68	335.00	.63000-01	1215.0	.1912	.2484	.2802	.9310	.1428-01	.9745-02	1.585	11.53	585.9
68	335.00	.90000-01	1216.0	.1767	.2286	.2573	.9310	.1311-01	.9003-02	1.484	10.80	583.8
68	335.00	.10000+00	1217.0	.1949	.2520	.2836	.9310	.1445-01	.9929-02	1.638	11.93	583.6
69	342.00	.95300	1275.0	.2819	.3791	.4384	.9304	.2236-01	.1437-01	2.099	14.23	603.1
69	342.00	.96700	1279.0	.2861	.4062	.4861	.9304	.2479-01	.1459-01	1.848	12.70	622.4
69	342.00	.98000	1283.0	.2083	.2945	.3515	.9304	.1792-01	.1062-01	1.359	9.166	621.1
69	342.00	.99400	1287.0	.1911	.2684	.3189	.9304	.1626-01	.9745-02	1.267	8.553	619.0

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF (RVZL20)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
67	355.00	.95300	1016.0	.3740	.5136	.6123	.9284	.3120-01	.1905-01	2.623	18.18	611.0
67	355.00	.96700	1017.0	.2944	.4321	.5414	.9284	.2758-01	.1500-01	1.762	12.17	631.2
67	355.00	.98000	1018.0	.2649	.3749	.4569	.9284	.2328-01	.1349-01	1.721	11.87	621.1
67	355.00	.99400	1019.0	.2198	.3058	.3680	.9284	.1875-01	.1120-01	1.490	10.20	615.6

LEFT SRB

PARAMETRIC DATA

ALPHA = 5.000 BETA = 9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
64	5.060	9.100	4.020	72.30	749.0	177.0	.4630	5.242	2620.	.2197-03	.1425-06	4.040
65	5.080	9.100	4.020	72.30	749.0	177.0	.4640	5.244	2621.	.2197-03	.1425-06	4.041
66	5.070	9.100	4.020	72.20	749.0	177.0	.4630	5.237	2620.	.2195-03	.1425-06	4.037

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
64	.5099-01	.1144-01
65	.5100-01	.1144-01
66	.5096-01	.1144-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
64	.00000	.11500	1000.0	.5740-01	.7150-01	.8280-01	.9220	.4222-02	.2928-02	.5580	4.116	558.3
64	.00000	.20000	1001.0	.1410-01	.1720-01	.1970-01	.9220	.1004-02	.7182-03	.1480	1.096	543.6
64	.00000	.25000	1003.0	.1620-01	.1990-01	.2280-01	.9220	.1164-02	.8277-03	.1670	1.240	546.9
64	.00000	.30000	1004.0	.1840-01	.2250-01	.2580-01	.9220	.1315-02	.9371-03	.1900	1.413	545.7
64	.00000	.50000	1006.0	.2550-01	.3130-01	.3590-01	.9220	.1830-02	.1300-02	.2620	1.918	547.3
64	.00000	.55000	1007.0	.2230-01	.2730-01	.3130-01	.9220	.1598-02	.1135-02	.2290	1.673	547.5
64	.00000	.60000	1008.0	.2450-01	.3010-01	.3460-01	.9220	.1766-02	.1248-02	.2490	1.842	549.7
64	.00000	.65000	1009.0	.2600-01	.3230-01	.3730-01	.9220	.1900-02	.1327-02	.2570	1.884	555.4
64	.00000	.70000	1010.0	.5570-01	.7030-01	.8250-01	.9220	.4204-02	.2840-02	.5110	3.879	568.9
65	.00000	.72400	1232.0	.5200-01	.6520-01	.7590-01	.9220	.3873-02	.2651-02	.4910	3.720	563.9
65	.00000	.74000	1242.0	.1048	.1330	.1566	.9220	.7988-02	.5346-02	.9440	7.278	572.4
64	.00000	.75000	1011.0	.1070	.1375	.1637	.9220	.8345-02	.5456-02	.9210	7.193	580.2
65	.00000	.77100	1251.0	.2260-01	.2770-01	.3160-01	.9220	.1609-02	.1155-02	.2390	1.891	542.1
64	.00000	.80000	1012.0	.4390-01	.5520-01	.6440-01	.9220	.3285-02	.2238-02	.4100	3.116	565.7
64	.00000	.87500	1013.0	.6410-01	.8060-01	.9420-01	.9220	.4805-02	.3267-02	.5960	4.197	566.4
65	.00000	.93200	1257.0	.5500-01	.6790-01	.7820-01	.9220	.3986-02	.2802-02	.5510	3.896	552.3
65	4.3800	.96500	1220.0	.6290-01	.7800-01	.8710-01	.9283	.4442-02	.3206-02	.6190	4.645	556.1
65	4.3800	.97500	1221.0	.7460-01	.9300-01	.1042	.9283	.5312-02	.3807-02	.7220	5.393	559.4

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF

(RVZL24)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
65	4.3800	.98500	1222.0	.6860-01	.8550-01	.9580-01	.9283	.4886-02	.3497-02	.6610	4.883	560.2
65	4.3800	.99500	1223.0	.6340-01	.7940-01	.8920-01	.9283	.4548-02	.3236-02	.6030	4.433	562.9
65	5.0000	.50000-01	1209.0	.4940-01	.6010-01	.6650-01	.9278	.3393-02	.2522-02	.5310	3.982	538.5
65	5.0000	.90000-01	1210.0	.7340-01	.9180-01	.1034	.9278	.5273-02	.3741-02	.6970	5.124	562.9
65	5.0000	10.000	1211.0	.8300-01	.1040	.1171	.9278	.5972-02	.4234-02	.7870	5.788	563.2
65	20.000	.96500	1224.0	.8520-01	.1059	.1169	.9307	.5964-02	.4343-02	.8300	6.118	558.1
65	20.000	.97500	1225.0	.8790-01	.1099	.1216	.9307	.6201-02	.4484-02	.8410	6.189	561.6
65	20.000	.98500	1226.0	.7420-01	.9230-01	.1018	.9307	.5193-02	.3784-02	.7240	5.373	557.8
65	35.000	10.000	1208.0	.8250-01	.1027	.1121	.9328	.5718-02	.4206-02	.8010	5.901	558.8
65	40.000	.96500	1228.0	.6140-01	.7610-01	.8210-01	.9346	.4187-02	.3132-02	.6090	4.530	554.6
65	40.000	.97500	1229.0	.7220-01	.9020-01	.9770-01	.9346	.4981-02	.3681-02	.6920	5.125	561.3
65	40.000	.99500	1231.0	.5150-01	.6460-01	.7010-01	.9346	.3577-02	.2629-02	.4860	3.574	564.2
64	45.000	.11500	1020.0	.6380-01	.7960-01	.9230-01	.9223	.4706-02	.3253-02	.6130	4.516	560.5
64	45.000	.14300	1021.0	.3880-01	.4770-01	.5460-01	.9223	.2782-02	.1979-02	.3990	2.957	547.4
64	45.000	.17100	1022.0	.2590-01	.3170-01	.3610-01	.9223	.1842-02	.1321-02	.2720	2.018	543.2
64	45.000	.20000	1023.0	.1240-01	.1520-01	.1730-01	.9223	.8808-03	.6340-03	.1320	.9800	541.2
64	45.000	.30000	1024.0	.5090-01	.6300-01	.7260-01	.9223	.3700-02	.2597-02	.5070	3.749	553.7
64	45.000	.55000	1027.0	.3740-01	.4600-01	.5270-01	.9223	.2688-02	.1904-02	.3800	2.797	549.3
64	45.000	.70000	1030.0	.7510-01	.9500-01	.1112	.9223	.5672-02	.3830-02	.6870	5.118	569.7
64	45.000	.80000	1031.0	.2990-01	.3740-01	.4350-01	.9223	.2216-02	.1525-02	.2850	2.132	562.2
64	45.000	.87500	1032.0	.3340-01	.4190-01	.4880-01	.9223	.2486-02	.1702-02	.3140	2.222	564.3
64	45.000	.92500	1033.0	.2720-01	.3390-01	.3920-01	.9223	.2001-02	.1388-02	.2640	1.863	558.9
65	45.000	.93200	1258.0	.3930-01	.4850-01	.5560-01	.9223	.2837-02	.2006-02	.3980	2.919	550.5
66	45.000	.93900	1264.0	.4510-01	.5570-01	.6410-01	.9223	.3269-02	.2297-02	.4490	3.279	553.2
64	50.000	.95300	1034.0	.4920-01	.6090-01	.6500-01	.9367	.3313-02	.2510-02	.4910	3.499	553.4
64	50.000	.96700	1035.0	.6670-01	.8360-01	.8970-01	.9367	.4572-02	.3403-02	.6310	4.508	563.4
64	50.000	.98000	1036.0	.6920-01	.8670-01	.9300-01	.9367	.4744-02	.3526-02	.6510	4.588	564.3
65	65.000	.43000-01	1200.0	.1620	.2080	.2219	.9390	.1132-01	.8264-02	1.401	10.22	579.6
65	65.000	.50000-01	1201.0	.1174	.1491	.1585	.9390	.8085-02	.5985-02	1.053	7.708	573.1
65	65.000	.57000-01	1202.0	.9450-01	.1195	.1270	.9390	.6475-02	.4820-02	.8620	6.318	570.3
65	65.000	.63000-01	1203.0	.7450-01	.9390-01	.9960-01	.9390	.5081-02	.3801-02	.6900	5.062	567.6
65	65.000	.90000-01	1204.0	.9690-01	.1215	.1286	.9390	.6560-02	.4944-02	.9180	6.748	563.5
65	65.000	.10000+00	1205.0	.1142	.1434	.1520	.9390	.7753-02	.5822-02	1.068	7.847	565.6
66	76.000	.12000	1290.0	.8900-01	.1118	.1291	.9239	.6579-02	.4537-02	.8330	5.963	565.3
66	76.000	.12700	1291.0	.8850-01	.1112	.1285	.9239	.6549-02	.4509-02	.8250	5.962	565.9
66	76.000	.13400	1292.0	.9420-01	.1204	.1410	.9239	.7186-02	.4799-02	.8230	5.876	577.3
66	76.000	.17300	1293.0	.2220-01	.2720-01	.3070-01	.9239	.1565-02	.1133-02	.2340	1.730	542.2
66	76.000	.18000	1294.0	.1990-01	.2420-01	.2730-01	.9239	.1392-02	.1012-02	.2110	1.547	540.1
66	76.000	.18600	1295.0	.1800-01	.2200-01	.2480-01	.9239	.1264-02	.9191-03	.1920	1.419	540.1
66	76.000	.19300	1296.0	.1640-01	.2000-01	.2250-01	.9239	.1149-02	.8352-03	.1750	1.295	539.9
66	76.000	.20000	1297.0	.1480-01	.1800-01	.2030-01	.9239	.1034-02	.7522-03	.1570	1.163	539.9
64	90.000	.20000-02	1039.0	.3308	.4844	.3605	.9870	.1838-01	.1686-01	1.991	13.93	630.9
64	90.000	.10000+00	1042.0	.1248	.1598	.1661	.9432	.8471-02	.6361-02	1.086	7.928	578.2

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF

(RVZL24)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
64	90.000	.13400	1045.0	.1958	.2912	.3868	.9247	.1972-01	.9981-02	1.141	8.098	634.7
64	90.000	.17300	1046.0	.4260-01	.5220-01	.5900-01	.9247	.3007-02	.2171-02	.4410	3.272	545.9
64	90.000	.18000	1047.0	.3860-01	.4710-01	.5300-01	.9247	.2701-02	.1966-02	.4080	3.030	541.6
64	90.000	.18600	1048.0	.3440-01	.4220-01	.4760-01	.9247	.2429-02	.1754-02	.3570	2.645	545.7
64	90.000	.19300	1049.0	.2840-01	.3480-01	.3930-01	.9247	.2005-02	.1449-02	.2950	2.189	545.4
64	90.000	.20000	1050.0	.2450-01	.3000-01	.3390-01	.9247	.1727-02	.1251-02	.2560	1.902	544.2
64	90.000	.25000	1051.0	.2170-01	.2670-01	.3030-01	.9247	.1544-02	.1107-02	.2210	1.637	549.3
64	90.000	.30000	1052.0	.6810-01	.8510-01	.9740-01	.9247	.4964-02	.3471-02	.6520	4.797	561.3
64	90.000	.50000	1054.0	.6730-01	.8370-01	.9560-01	.9247	.4874-02	.3430-02	.6540	4.740	558.4
64	90.000	.60000	1055.0	.3980-01	.4910-01	.5570-01	.9247	.2839-02	.2032-02	.4030	2.965	550.5
64	90.000	.75000	1057.0	.1137	.1498	.1785	.9247	.9101-02	.5799-02	.9020	6.879	593.4
64	90.000	.80000	1058.0	.1940-01	.2420-01	.2770-01	.9247	.1413-02	.9883-03	.1850	1.365	561.3
64	90.000	.92500	1060.0	.3910-01	.4820-01	.5470-01	.9247	.2791-02	.1992-02	.3930	2.792	551.9
64	90.000	.95300	1061.0	.4620-01	.5700-01	.5860-01	.9442	.2989-02	.2357-02	.4660	3.339	551.1
64	90.000	.96700	1062.0	.4630-01	.5750-01	.5920-01	.9442	.3018-02	.2361-02	.4530	3.256	557.0
64	90.000	.98000	1063.0	.4770-01	.5950-01	.6130-01	.9442	.3125-02	.2430-02	.4570	3.236	560.9
64	90.000	.99400	1064.0	.4560-01	.5720-01	.5900-01	.9442	.3007-02	.2323-02	.4270	3.025	565.3
64	135.00	.14300	1066.0	.1236	.1607	.1888	.9252	.9626-02	.6301-02	1.022	7.429	586.7
64	135.00	.20000	1068.0	.7480-01	.9470-01	.1091	.9252	.5565-02	.3815-02	.6800	4.983	570.7
64	135.00	.30000	1069.0	.5860-01	.7220-01	.8150-01	.9252	.4156-02	.2990-02	.5970	4.425	549.2
64	135.00	.50000	1070.0	.8890-01	.1117	.1279	.9252	.6520-02	.4535-02	.8350	6.032	564.9
64	135.00	.60000	1071.0	.5790-01	.7190-01	.8160-01	.9252	.4161-02	.2952-02	.5690	4.202	556.1
64	135.00	.70000	1072.0	.4980-01	.6230-01	.7120-01	.9252	.3630-02	.2541-02	.4750	3.554	562.1
65	135.00	.72400	1237.0	.6160-01	.7720-01	.8840-01	.9252	.4507-02	.3139-02	.5790	4.420	564.5
65	135.00	.74000	1243.0	.1099	.1426	.1672	.9252	.8527-02	.5605-02	.9160	6.965	585.6
65	135.00	.75000	1246.0	.1138	.1540	.1868	.9252	.9527-02	.5801-02	.8310	6.235	605.8
65	135.00	.77100	1252.0	.1399	.1772	.2042	.9252	.1041-01	.7134-02	1.269	9.584	571.2
64	135.00	.80000	1073.0	.4450-01	.5610-01	.6430-01	.9252	.3278-02	.2271-02	.4140	3.093	566.6
65	135.00	.93200	1259.0	.5000-01	.6270-01	.7170-01	.9252	.3657-02	.2552-02	.4730	3.447	563.6
66	135.00	.93300	1265.0	.4260-01	.5400-01	.6220-01	.9252	.3172-02	.2171-02	.3850	2.786	571.4
64	135.00	.95300	1074.0	.4800-01	.6110-01	.6270-01	.9456	.3194-02	.2446-02	.4260	3.002	575.0
64	135.00	.98000	1076.0	.8670-01	.1157	.1192	.9456	.6080-02	.4422-02	.6610	4.590	599.5
66	138.00	.95300	1266.0	.4650-01	.6000-01	.6170-01	.9454	.3144-02	.2369-02	.3930	2.744	583.0
66	138.00	.96700	1268.0	.6300-01	.8540-01	.8830-01	.9454	.4499-02	.3213-02	.4600	3.165	605.8
66	138.00	.98000	1270.0	.8630-01	.1183	.1225	.9454	.6241-02	.4399-02	.6100	4.161	610.3
66	138.00	.99400	1272.0	.8860-01	.1219	.1262	.9454	.6434-02	.4517-02	.6200	4.255	611.6
66	162.00	.95300	1267.0	.4170-01	.5670-01	.6010-01	.9420	.3064-02	.2127-02	.3020	2.148	606.8
66	162.00	.96700	1269.0	.4670-01	.6610-01	.7080-01	.9420	.3606-02	.2380-02	.3040	2.154	621.1
66	162.00	.98000	1271.0	.7210-01	.1016	.1087	.9420	.5540-02	.3677-02	.4750	3.354	619.7
64	180.00	.20000	1078.0	.5770-01	.7270-01	.8460-01	.9228	.4314-02	.2944-02	.5360	3.932	567.0
64	180.00	.40000	1079.0	.6640-01	.8360-01	.9730-01	.9228	.4963-02	.3383-02	.6140	4.349	567.4
64	180.00	.60000	1080.0	.6760-01	.8520-01	.9920-01	.9228	.5060-02	.3446-02	.6240	4.581	567.8
64	180.00	.70000	1081.0	.4970-01	.6250-01	.7280-01	.9228	.3710-02	.2534-02	.4620	3.485	566.6

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF (RVZL24)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
65	180.00	.74000	1238.0	.8250-01	.1060	.1255	.9228	.6401-02	.4207-02	.7090	5.331	580.5
64	180.00	.75000	1082.0	.5270-01	.6750-01	.7980-01	.9228	.4069-02	.2685-02	.4560	3.566	579.0
65	180.00	.77100	1247.0	.5170-01	.6460-01	.7470-01	.9228	.3810-02	.2639-02	.4960	3.888	561.0
64	180.00	.80000	1083.0	.5210-01	.6650-01	.7840-01	.9228	.3995-02	.2655-02	.4570	3.397	576.7
65	180.00	.93200	1253.0	.5060-01	.6460-01	.7620-01	.9228	.3884-02	.2579-02	.4440	3.177	577.1
65	180.00	.93900	1260.0	.5630-01	.7270-01	.8620-01	.9228	.4397-02	.2873-02	.4790	3.399	582.4
64	180.00	.96700	1085.0	.5650-01	.7600-01	.8260-01	.9384	.4213-02	.2882-02	.4210	2.929	602.9
64	180.00	.98000	1086.0	.6820-01	.9210-01	.1003	.9384	.5112-02	.3476-02	.5010	3.496	604.7
64	180.00	.99400	1087.0	.6200-01	.8410-01	.9180-01	.9384	.4679-02	.3159-02	.4490	3.105	606.9
66	198.00	.95300	1276.0	.7890-01	.1007	.1101	.9346	.5609-02	.4020-02	.6950	5.114	576.0
66	198.00	.96700	1280.0	.5820-01	.7710-01	.8570-01	.9346	.4366-02	.2965-02	.4530	3.254	596.2
66	198.00	.98000	1284.0	.4940-01	.6620-01	.7400-01	.9346	.3772-02	.2517-02	.3700	2.646	601.7
64	225.00	.11500	1088.0	.7880-01	.1000+00	.1177	.9220	.6002-02	.4016-02	.7090	5.190	572.4
64	225.00	.17700	1090.0	.1770-01	.2160-01	.2470-01	.9220	.1260-02	.9030-03	.1860	1.385	542.6
64	225.00	.60000	1091.0	.4270-01	.5280-01	.6090-01	.9220	.3107-02	.2176-02	.4240	3.136	553.9
64	225.00	.70000	1092.0	.4750-01	.5910-01	.6850-01	.9220	.3493-02	.2420-02	.4600	3.429	558.7
65	225.00	.72400	1233.0	.5340-01	.6650-01	.7710-01	.9220	.3934-02	.2722-02	.5160	3.947	559.5
65	225.00	.74000	1239.0	.4810-01	.5960-01	.6890-01	.9220	.3511-02	.2454-02	.4760	3.661	555.1
65	225.00	.75000	1244.0	.7620-01	.9630-01	.1130	.9220	.5763-02	.3886-02	.6970	5.361	569.7
65	225.00	.77100	1248.0	.6760-01	.8430-01	.9780-01	.9220	.4990-02	.3447-02	.6510	5.013	560.2
64	225.00	.80000	1093.0	.5290-01	.6620-01	.7690-01	.9220	.3921-02	.2699-02	.5060	3.723	561.6
65	225.00	.93200	1254.0	.7060-01	.8780-01	.1017	.9220	.5187-02	.3599-02	.6870	4.915	558.3
65	225.00	.93900	1261.0	.6810-01	.8480-01	.9840-01	.9220	.5017-02	.3473-02	.6590	4.687	559.3
66	238.00	.95300	1277.0	.8390-01	.1048	.1180	.9277	.6012-02	.4276-02	.8020	5.883	561.4
66	238.00	.96700	1281.0	.1098	.1392	.1580	.9277	.8052-02	.5598-02	.9950	7.385	571.2
66	238.00	.98000	1285.0	.9820-01	.1243	.1411	.9277	.7191-02	.5003-02	.8900	6.610	571.0
64	256.00	.11500	1094.0	.6030-01	.7530-01	.8750-01	.9220	.4464-02	.3073-02	.5760	4.244	561.4
64	256.00	.12800	1095.0	.2570-01	.3150-01	.3590-01	.9220	.1833-02	.1312-02	.2700	2.003	543.4
64	256.00	.14600	1096.0	.1870-01	.2280-01	.2590-01	.9220	.1322-02	.9539-03	.2000	1.489	539.2
65	256.00	.20000	1097.0	.1340-01	.1600-01	.1800-01	.9220	.9200-03	.6817-03	.1540	1.154	523.5
65	256.00	.40000	1098.0	.1360-01	.1650-01	.1880-01	.9220	.9607-03	.6928-03	.1450	1.029	539.5
65	256.00	.60000	1099.0	.3780-01	.4630-01	.5300-01	.9220	.2705-02	.1928-02	.3920	2.892	545.6
65	256.00	.80000	1100.0	.3050-01	.3770-01	.4340-01	.9220	.2213-02	.1556-02	.3060	2.266	552.2
65	256.00	.87500	1101.0	.3470-01	.4320-01	.5010-01	.9220	.2555-02	.1772-02	.3380	2.373	558.4
65	270.00	.50000-01	1102.0	.1015	.1277	.1469	.9245	.7492-02	.5177-02	.9470	6.954	566.2
65	270.00	.10000+00	1103.0	.9090-01	.1137	.1304	.9245	.6649-02	.4636-02	.8660	6.368	562.4
65	270.00	.11500	1104.0	.5150-01	.6390-01	.7390-01	.9220	.3768-02	.2624-02	.5050	3.728	556.6
65	270.00	.14600	1105.0	.2890-01	.3520-01	.4010-01	.9220	.2044-02	.1475-02	.3100	2.307	539.1
65	270.00	.72400	1234.0	.2860-01	.3480-01	.3960-01	.9220	.2019-02	.1460-02	.3080	2.304	538.0
65	270.00	.74000	1240.0	.3640-01	.4450-01	.5080-01	.9220	.2589-02	.1856-02	.3830	2.862	542.9
65	270.00	.77100	1249.0	.3220-01	.3950-01	.4510-01	.9220	.2302-02	.1643-02	.3360	2.614	544.9
65	270.00	.93200	1255.0	.4820-01	.5930-01	.6800-01	.9220	.3469-02	.2458-02	.4930	3.570	548.5
65	270.00	.93900	1262.0	.4580-01	.5660-01	.6520-01	.9220	.3325-02	.2335-02	.4580	3.356	552.8

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF

(RVZL24)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
65	270.00	.95300	1110.0	.5600-01	.6930-01	.7860-01	.9249	.4009-02	.2855-02	.5580	3.962	553.8
65	270.00	.96700	1111.0	.6470-01	.8110-01	.9280-01	.9249	.4733-02	.3301-02	.6140	4.367	563.2
65	270.00	.98000	1112.0	.6360-01	.7960-01	.9110-01	.9249	.4647-02	.3244-02	.6040	4.276	562.8
65	270.00	.99400	1113.0	.5960-01	.7460-01	.8550-01	.9249	.4358-02	.3038-02	.5640	4.016	563.4
65	284.00	.11500	1114.0	.5320-01	.6610-01	.7650-01	.9220	.3900-02	.2714-02	.5210	3.846	557.0
65	284.00	.12800	1115.0	.2440-01	.2970-01	.3390-01	.9220	.1728-02	.1243-02	.2590	1.926	540.8
65	284.00	.14600	1116.0	.2130-01	.2590-01	.2940-01	.9220	.1499-02	.1086-02	.2310	1.720	536.7
65	284.00	.20000	1117.0	.1500-01	.1820-01	.2060-01	.9220	.1051-02	.7650-03	.1640	1.227	534.3
65	284.00	.40000	1118.0	.2550-01	.3110-01	.3540-01	.9220	.1804-02	.1300-02	.2720	1.932	540.1
65	284.00	.60000	1119.0	.2200-01	.2670-01	.3040-01	.9220	.1549-02	.1121-02	.2370	1.756	537.4
65	284.00	.80000	1120.0	.4310-01	.5330-01	.6140-01	.9220	.3131-02	.2197-02	.4310	3.237	553.1
65	284.00	.87500	1121.0	.6730-01	.8390-01	.9730-01	.9220	.4964-02	.3433-02	.6500	4.606	559.7
66	302.00	.98000	1282.0	.5550-01	.6980-01	.8050-01	.9242	.4102-02	.2828-02	.5160	3.805	566.3
66	302.00	.99400	1286.0	.5110-01	.6450-01	.7470-01	.9242	.3806-02	.2602-02	.4670	3.270	569.5
65	315.00	.92500	1122.0	.5840-01	.7240-01	.8350-01	.9220	.4259-02	.2980-02	.5790	4.280	554.6
65	315.00	.93900	1124.0	.1210-01	.1470-01	.1670-01	.9220	.8542-03	.6189-03	.1310	.9780	537.0
65	315.00	.95300	1125.0	.1510-01	.1840-01	.2100-01	.9220	.1070-02	.7724-03	.1620	1.208	539.0
65	315.00	.96700	1126.0	.2890-01	.3540-01	.4050-01	.9220	.2067-02	.1476-02	.3020	2.241	544.6
65	315.00	.98000	1127.0	.2660-01	.3240-01	.3700-01	.9220	.1886-02	.1354-02	.2810	2.052	541.9
65	315.00	.99400	1128.0	.2240-01	.2730-01	.3110-01	.9220	.1586-02	.1141-02	.2380	1.756	540.9
65	315.00	.70000	1129.0	.3660-01	.4530-01	.5230-01	.9220	.2667-02	.1869-02	.3650	2.716	553.8
65	315.00	.72400	1235.0	.3860-01	.4770-01	.5490-01	.9220	.2800-02	.1966-02	.3860	2.912	552.8
65	315.00	.74000	1241.0	.6150-01	.7680-01	.8910-01	.9220	.4545-02	.3137-02	.5920	4.494	560.5
65	315.00	.75000	1245.0	.5480-01	.6870-01	.8010-01	.9220	.4083-02	.2796-02	.5190	3.958	563.7
65	315.00	.77100	1250.0	.2920-01	.3570-01	.4070-01	.9220	.2078-02	.1487-02	.3060	2.425	543.5
65	315.00	.80000	1130.0	.4620-01	.5740-01	.6640-01	.9220	.3386-02	.2356-02	.4520	3.393	557.1
65	315.00	.87500	1131.0	.7120-01	.8920-01	.1039	.9220	.5299-02	.3630-02	.6740	4.748	563.5
65	315.00	1265.0	1132.0	.4820-01	.5970-01	.6900-01	.9220	.3519-02	.2457-02	.4750	3.375	555.6
65	315.00	1074.0	1256.0	.5380-01	.6670-01	.7700-01	.9220	.3928-02	.2742-02	.5300	3.766	555.6
66	315.00	1075.0	1263.0	.5860-01	.7250-01	.8360-01	.9220	.4260-02	.2985-02	.5830	4.207	553.8
65	315.00	1076.0	1133.0	.5110-01	.6310-01	.7170-01	.9244	.3654-02	.2604-02	.5130	3.636	552.1
65	315.00	1077.0	1134.0	.4730-01	.5910-01	.6780-01	.9244	.3458-02	.2412-02	.4520	3.227	561.9
65	315.00	1057.0	1135.0	.4790-01	.5990-01	.6870-01	.9244	.3506-02	.2444-02	.4570	3.231	562.2
65	315.00	1058.0	1136.0	.3470-01	.4350-01	.5000-01	.9244	.2552-02	.1768-02	.3260	2.280	564.8
65	330.00	.72400	1236.0	.6130-01	.7670-01	.8920-01	.9220	.4548-02	.3128-02	.5850	4.503	562.0
65	335.00	.43000-01	1212.0	.1007	.1268	.1457	.9249	.7430-02	.5135-02	.9350	6.862	567.0
65	335.00	.50000-01	1213.0	.8700-01	.1093	.1254	.9249	.6395-02	.4439-02	.8160	5.997	565.2
65	335.00	.57000-01	1214.0	.8570-01	.1074	.1231	.9249	.6277-02	.4371-02	.8100	5.954	563.9
65	335.00	.63000-01	1215.0	.7450-01	.9310-01	.1065	.9249	.5429-02	.3798-02	.7110	5.231	561.9
65	335.00	.90000-01	1216.0	.7080-01	.8850-01	.1013	.9249	.5165-02	.3608-02	.6730	4.952	562.6
65	335.00	.10000+00	1217.0	.8240-01	.1033	.1183	.9249	.6031-02	.4203-02	.7800	5.735	563.5
66	342.00	.95300	1275.0	.4250-01	.5280-01	.5990-01	.9258	.3051-02	.2164-02	.4130	2.867	557.9
66	342.00	.96700	1279.0	.5390-01	.6770-01	.7720-01	.9258	.3936-02	.2749-02	.5070	3.580	564.7

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, LEFT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
66	342.00	.98000	1283.0	.5300-01	.6640-01	.7570-01	.9258	.3860-02	.2699-02	.4980	3.455	564.3
66	342.00	.99400	1287.0	.4480-01	.5640-01	.6440-01	.9258	.3283-02	.2284-02	.4170	2.887	566.5
64	355.00	.95300	1016.0	.4870-01	.6060-01	.6830-01	.9271	.3480-02	.2483-02	.4730	3.363	558.5
64	355.00	.96700	1017.0	.7000-01	.8800-01	.9970-01	.9271	.5083-02	.3569-02	.6540	4.665	565.7
64	355.00	.98000	1018.0	.6860-01	.8620-01	.9770-01	.9271	.4982-02	.3499-02	.6420	4.547	565.6
64	355.00	.99400	1019.0	.6370-01	.8040-01	.9130-01	.9271	.4655-02	.3247-02	.5860	4.106	568.5

LEFT SRB

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
243	-.1000+00	.0000	3.010	36.90	705.0	250.7	.9900	6.279	2335.	.3313-03	.2005-06	3.859
244	-.1000+00	.0000	3.010	36.80	705.0	250.6	.9870	6.262	2335.	.3306-03	.2005-06	3.850
245	-.1000+00	.0000	3.010	36.80	705.0	250.6	.9880	6.263	2335.	.3306-03	.2005-06	3.851

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
243	.5530-01	.9231-02
244	.5522-01	.9241-02
245	.5522-01	.9241-02

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
243	.00000	.11500	1000.0	.1185	.1560	.1729	.9345	.9558-02	.6555-02	.9630	7.103	558.0
243	.00000	.20000	1001.0	.6820-01	.8680-01	.9480-01	.9345	.5239-02	.3770-02	.6210	4.620	540.2
243	.00000	.25000	1003.0	.7910-01	.1017	.1115	.9345	.6165-02	.4376-02	.6970	5.169	545.7
243	.00000	.30000	1004.0	.7830-01	.1005	.1101	.9345	.6090-02	.4328-02	.6900	5.124	545.3
243	.00000	.40000	1005.0	.7700-01	.9910-01	.1088	.9345	.6018-02	.4257-02	.6720	4.820	547.1
243	.00000	.50000	1006.0	.1379	.1816	.2014	.9345	.1114-01	.7624-02	1.116	8.120	558.5
243	.00000	.55000	1007.0	.1345	.1772	.1966	.9345	.1087-01	.7437-02	1.087	7.905	558.8
243	.00000	.60000	1008.0	.1105	.1439	.1588	.9345	.8783-02	.6110-02	.9270	6.851	553.2
243	.00000	.65000	1009.0	.9820-01	.1282	.1416	.9345	.7829-02	.5429-02	.8180	6.001	554.3
243	.00000	.70000	1010.0	.8310-01	.1083	.1195	.9345	.6606-02	.4596-02	.6970	5.332	553.2
244	.00000	.72400	1232.0	.8880-01	.1191	.1332	.9345	.7356-02	.4901-02	.6780	5.133	566.4
244	.00000	.74000	1242.0	.7780-01	.1021	.1130	.9345	.6242-02	.4299-02	.6370	4.951	556.4
243	.00000	.75000	1011.0	.8010-01	.1060	.1178	.9345	.6514-02	.4431-02	.6400	5.051	560.5
243	.00000	.80000	1012.0	.8990-01	.1201	.1341	.9345	.7413-02	.4974-02	.6980	5.307	564.6
243	.00000	.87500	1013.0	.7390-01	.9800-01	.1090	.9345	.6029-02	.4084-02	.5850	4.124	561.8
244	.00000	.93200	1257.0	.6720-01	.8820-01	.9760-01	.9345	.5391-02	.3709-02	.5490	3.867	556.8
244	4.3800	.96500	1220.0	.1253	.1740	.1839	.9431	.1015-01	.6919-02	.8710	6.462	578.8
244	4.3800	.97500	1221.0	.1864	.2580	.2724	.9431	.1504-01	.1029-01	1.306	9.665	577.8

IH72, OTS CLEAN, LEFT SRB HI/HREF (RVZL29)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
244	4.3800	.98500	1222.0	.1571	.2161	.2278	.9431	.1258-01	.8677-02	1.121	8.223	575.5
244	4.3800	.99500	1223.0	.1422	.1943	.2047	.9431	.1130-01	.7854-02	1.032	7.554	573.3
244	5.0000	.50000-01	1209.0	.5570-01	.6870-01	.7120-01	.9425	.3930-02	.3075-02	.5730	4.340	518.4
244	5.0000	.90000-01	1210.0	.1946	.2567	.2696	.9425	.1489-01	.1075-01	1.565	11.53	559.1
244	5.0000	10.000	1211.0	.2104	.2778	.2919	.9425	.1612-01	.1162-01	1.686	12.42	559.6
244	20.000	.96500	1224.0	.1215	.1677	.1770	.9431	.9773-02	.6707-02	.8570	6.260	576.9
244	20.000	.97500	1225.0	.1707	.2344	.2471	.9431	.1364-01	.9426-02	1.222	8.938	575.0
244	20.000	.98500	1226.0	.1474	.2000	.2103	.9431	.1161-01	.8137-02	1.090	8.037	570.8
244	20.000	.99500	1227.0	.1268	.1708	.1794	.9431	.9907-02	.7002-02	.9570	7.045	568.0
244	35.000	.50000-01	1206.0	.4870-01	.6000-01	.6220-01	.9425	.3434-02	.2689-02	.5030	3.811	517.7
244	35.000	10.000	1208.0	.2005	.2628	.2757	.9425	.1523-01	.1107-01	1.645	12.14	556.1
244	40.000	.96500	1228.0	.1029	.1383	.1452	.9431	.8016-02	.5681-02	.7820	5.780	567.0
244	40.000	.97500	1229.0	.1227	.1648	.1730	.9431	.9553-02	.6775-02	.9340	6.906	566.8
244	40.000	.99500	1231.0	.1082	.1451	.1522	.9431	.8405-02	.5976-02	.8290	6.091	565.9
243	45.000	.11500	1020.0	.1213	.1589	.1757	.9345	.9718-02	.6707-02	1.000	7.379	555.9
243	45.000	.14300	1021.0	.1004	.1288	.1412	.9345	.7810-02	.5551-02	.8860	6.574	545.3
243	45.000	.17100	1022.0	.1016	.1303	.1429	.9345	.7901-02	.5617-02	.8970	6.659	545.2
243	45.000	.20000	1023.0	.8460-01	.1075	.1174	.9345	.6490-02	.4676-02	.7720	5.749	539.7
243	45.000	.30000	1024.0	.5740-01	.7340-01	.8030-01	.9345	.4440-02	.3176-02	.5150	3.828	542.7
243	45.000	.40000	1025.0	.1284	.1702	.1892	.9345	.1046-01	.7101-02	1.020	7.269	561.2
243	45.000	.50000	1026.0	.1618	.2153	.2398	.9345	.1326-01	.8945-02	1.269	9.239	563.1
243	45.000	.55000	1027.0	.1373	.1809	.2006	.9345	.1109-01	.7591-02	1.111	8.132	558.6
243	45.000	.80000	1031.0	.9280-01	.1205	.1328	.9345	.7343-02	.5130-02	.7860	5.913	551.7
243	45.000	.87500	1032.0	.4660-01	.5990-01	.6570-01	.9345	.3635-02	.2576-02	.4080	2.912	546.4
243	45.000	.92500	1033.0	.3440-01	.4440-01	.4870-01	.9345	.2695-02	.1901-02	.2980	2.114	548.3
244	45.000	.93200	1258.0	.3430-01	.4410-01	.4840-01	.9345	.2674-02	.1895-02	.3000	2.206	546.2
245	45.000	.93900	1264.0	.4230-01	.5480-01	.6030-01	.9345	.3331-02	.2336-02	.3610	2.637	550.2
243	50.000	.95300	1034.0	.1104	.1477	.1550	.9431	.8569-02	.6102-02	.8500	6.026	565.5
243	50.000	.96700	1035.0	.9310-01	.1247	.1308	.9431	.7232-02	.5147-02	.7160	5.106	565.8
243	50.000	.98000	1036.0	.1155	.1553	.1630	.9431	.9015-02	.6386-02	.8790	6.181	567.3
244	65.000	.43000-01	1200.0	.2631	.3535	.3728	.9424	.2059-01	.1453-01	2.001	14.69	566.9
244	65.000	.50000-01	1201.0	.2132	.2800	.2940	.9424	.1623-01	.1177-01	1.738	12.83	557.0
244	65.000	.57000-01	1202.0	.2049	.2679	.2809	.9424	.1551-01	.1131-01	1.696	12.52	554.8
244	65.000	.63000-01	1203.0	.1769	.2309	.2421	.9424	.1337-01	.9771-02	1.473	10.89	553.9
244	65.000	.90000-01	1204.0	.1557	.2061	.2167	.9424	.1197-01	.8599-02	1.240	9.129	560.5
244	65.000	.10000+00	1205.0	.2220	.2979	.3142	.9424	.1735-01	.1226-01	1.693	12.43	566.5
245	76.000	.12000	1290.0	.1580	.2079	.2304	.9345	.1272-01	.8727-02	1.282	9.210	557.8
245	76.000	.12700	1291.0	.1518	.2011	.2235	.9345	.1234-01	.8383-02	1.206	8.734	560.8
245	76.000	.13400	1292.0	.1525	.2023	.2250	.9345	.1243-01	.8424-02	1.207	8.683	561.4
245	76.000	.17300	1293.0	.8830-01	.1127	.1233	.9345	.6807-02	.4875-02	.7930	5.853	542.1
245	76.000	.18000	1294.0	.7990-01	.1015	.1107	.9345	.6115-02	.4411-02	.7300	5.349	539.1
245	76.000	.18600	1295.0	.7100-01	.8990-01	.9800-01	.9345	.5411-02	.3921-02	.6570	4.864	537.1
245	76.000	.19300	1296.0	.6770-01	.8550-01	.9310-01	.9345	.5142-02	.3739-02	.6330	4.703	535.5

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
245	76.000	.20000	1297.0	.6540-01	.8250-01	.8980-01	.9345	.4957-02	.3609-02	.6130	4.540	534.9
243	90.000	.20000-02	1039.0	.4212	.6171	.4759	.9819	.2631-01	.2329-01	2.585	18.42	593.9
243	90.000	.10000+00	1042.0	.3151	.4453	.4751	.9424	.2627-01	.1743-01	2.101	15.29	584.3
243	90.000	.13400	1045.0	.1729	.2372	.2681	.9345	.1482-01	.9562-02	1.244	9.095	574.8
243	90.000	.17300	1046.0	.8540-01	.1100	.1208	.9345	.6678-02	.4724-02	.7450	5.527	547.1
243	90.000	.18000	1047.0	.7670-01	.9700-01	.1056	.9345	.5842-02	.4240-02	.7140	5.324	536.5
243	90.000	.18300	1048.0	.7880-01	.1011	.1108	.9345	.6128-02	.4358-02	.6960	5.168	545.1
243	90.000	.19300	1049.0	.6700-01	.8600-01	.9420-01	.9345	.5210-02	.3707-02	.5930	4.403	544.9
243	90.000	.20000	1050.0	.5930-01	.7570-01	.8280-01	.9345	.4581-02	.3277-02	.5320	3.952	542.6
243	90.000	.25000	1051.0	.3970-01	.5030-01	.5490-01	.9345	.3034-02	.2197-02	.3680	2.739	537.5
243	90.000	.30000	1052.0	.4840-01	.6170-01	.6750-01	.9345	.3732-02	.2675-02	.4360	3.242	541.9
243	90.000	.50000	1054.0	.8140-01	.1056	.1164	.9345	.6434-02	.4501-02	.6920	5.033	551.2
243	90.000	.60000	1055.0	.8480-01	.1104	.1218	.9345	.6736-02	.4687-02	.7110	5.223	553.1
243	90.000	.75000	1057.0	.7580-01	.9900-01	.1094	.9345	.6050-02	.4190-02	.6290	4.891	554.8
243	90.000	.80000	1058.0	.2480-01	.3160-01	.3450-01	.9345	.1908-02	.1369-02	.2240	1.664	541.4
243	90.000	.95300	1061.0	.7270-01	.9740-01	.1022	.9430	.5653-02	.4020-02	.5590	3.971	565.9
243	90.000	.98000	1063.0	.8040-01	.1072	.1125	.9430	.6219-02	.4444-02	.6250	4.420	564.2
243	90.000	.99400	1064.0	.5580-01	.7480-01	.7860-01	.9430	.4344-02	.3085-02	.4280	3.029	566.3
243	135.00	.14300	1066.0	.1283	.1727	.1934	.9345	.1069-01	.7095-02	.9740	7.146	567.7
243	135.00	.17100	1067.0	.8690-01	.1134	.1253	.9345	.6927-02	.4806-02	.7250	5.353	554.1
243	135.00	.20000	1068.0	.6890-01	.8900-01	.9790-01	.9345	.5413-02	.3811-02	.5940	4.403	548.9
243	135.00	.30000	1069.0	.5120-01	.6590-01	.7230-01	.9345	.3997-02	.2833-02	.4490	3.333	546.3
243	135.00	.50000	1070.0	.8080-01	.1060	.1174	.9345	.6490-02	.4469-02	.6620	4.807	556.7
243	135.00	.60000	1071.0	.6810-01	.8940-01	.9900-01	.9345	.5476-02	.3765-02	.5560	4.105	557.1
243	135.00	.70000	1072.0	.5460-01	.7230-01	.8030-01	.9345	.4442-02	.3021-02	.4360	3.265	560.6
244	135.00	.72400	1237.0	.6280-01	.8320-01	.9260-01	.9345	.5112-02	.3469-02	.4980	3.809	561.0
244	135.00	.74000	1243.0	.6510-01	.8640-01	.9620-01	.9345	.5312-02	.3593-02	.5120	3.941	562.1
244	135.00	.75000	1246.0	.1020-01	.1290-01	.1410-01	.9345	.7784-03	.5617-03	.9300-01	.7220	538.9
244	135.00	.77100	1252.0	.7120-01	.9460-01	.1053	.9345	.5815-02	.3929-02	.5590	4.242	562.3
243	135.00	.80000	1073.0	.6840-01	.8950-01	.9900-01	.9345	.5477-02	.3782-02	.5640	4.235	555.7
244	135.00	.93200	1259.0	.5640-01	.7330-01	.8070-01	.9345	.4457-02	.3117-02	.4780	3.505	551.2
245	135.00	.93900	1265.0	.7900-01	.1035	.1145	.9345	.6321-02	.4362-02	.6500	4.734	555.7
243	135.00	.95300	1074.0	.5480-01	.7470-01	.7880-01	.9430	.4357-02	.3028-02	.3990	2.818	573.1
245	138.00	.95300	1266.0	.3330-01	.4560-01	.4810-01	.9430	.2659-02	.1841-02	.2400	1.686	574.0
245	138.00	.96700	1268.0	.5140-01	.7090-01	.7490-01	.9430	.4138-02	.2840-02	.3640	2.539	576.6
245	138.00	.98000	1270.0	.4670-01	.6470-01	.6840-01	.9430	.3778-02	.2581-02	.3270	2.269	577.9
245	138.00	.99400	1272.0	.2540-01	.3510-01	.3710-01	.9430	.2048-02	.1404-02	.1790	1.253	576.8
245	162.00	.96700	1269.0	.2250-01	.3190-01	.3390-01	.9429	.1873-02	.1242-02	.1480	1.068	585.3
245	162.00	.98000	1271.0	.2720-01	.3860-01	.4100-01	.9429	.2266-02	.1503-02	.1790	1.288	585.3
243	180.00	.20000	1078.0	.7120-01	.9190-01	.1010	.9345	.5586-02	.3939-02	.6170	4.569	548.3
243	180.00	.40000	1079.0	.7060-01	.9170-01	.1010	.9345	.5583-02	.3907-02	.6010	4.287	551.1
243	180.00	.60000	1080.0	.8380-01	.1115	.1242	.9345	.6865-02	.4634-02	.6580	4.843	562.8
243	180.00	.70000	1081.0	.8440-01	.1134	.1270	.9345	.7020-02	.4666-02	.6420	4.845	567.2

IH72, OTS CLEAN, LEFT SRB HI/HREF (RVZL29)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
244	180.00	.74000	1238.0	.9500-01	.1279	.1433	.9345	.7915-02	.5244-02	.7170	5.426	567.9
243	180.00	.75000	1082.0	.9000-01	.1213	.1359	.9345	.7516-02	.4976-02	.6800	5.344	568.3
244	180.00	.77100	1247.0	.7520-01	.1002	.1117	.9345	.6168-02	.4151-02	.5860	4.581	563.6
243	180.00	.80000	1083.0	.9090-01	.1221	.1366	.9345	.7552-02	.5025-02	.6930	5.177	566.9
244	180.00	.93900	1260.0	.4450-01	.5920-01	.6610-01	.9345	.3648-02	.2455-02	.3460	2.481	563.5
243	180.00	.96700	1085.0	.4040-01	.5800-01	.6190-01	.9429	.3422-02	.2233-02	.2590	1.811	589.1
243	180.00	.98000	1086.0	.5810-01	.8360-01	.8910-01	.9429	.4929-02	.3214-02	.3720	2.610	589.3
243	180.00	.99400	1087.0	.5420-01	.7800-01	.8320-01	.9429	.4600-02	.2996-02	.3460	2.413	589.5
245	198.00	.95300	1276.0	.3310-01	.4800-01	.5130-01	.9429	.2834-02	.1826-02	.2060	1.507	591.6
245	198.00	.96700	1280.0	.5630-01	.8210-01	.8780-01	.9429	.4849-02	.3111-02	.3490	2.515	592.4
243	225.00	.11500	1088.0	.1180	.1564	.1740	.9345	.9621-02	.6524-02	.9360	6.889	561.5
243	225.00	.17700	1090.0	.7120-01	.9120-01	.9990-01	.9345	.5523-02	.3939-02	.6340	4.709	543.9
243	225.00	.60000	1091.0	.7540-01	.9820-01	.1084	.9345	.5994-02	.4169-02	.6320	4.673	553.2
243	225.00	.70000	1092.0	.5770-01	.7550-01	.8350-01	.9345	.4619-02	.3193-02	.4780	3.563	555.3
244	225.00	.72400	1233.0	.5400-01	.7070-01	.7820-01	.9345	.4320-02	.2981-02	.4440	3.403	555.7
244	225.00	.74000	1239.0	.5540-01	.7270-01	.8050-01	.9345	.4443-02	.3057-02	.4530	3.479	556.7
244	225.00	.75000	1244.0	.5350-01	.7040-01	.7800-01	.9345	.4304-02	.2956-02	.4360	3.370	557.3
244	225.00	.77100	1248.0	.4810-01	.6330-01	.7020-01	.9345	.3877-02	.2655-02	.3890	2.995	558.3
243	225.00	.80000	1093.0	.5770-01	.7600-01	.8420-01	.9345	.4658-02	.3192-02	.4690	3.455	558.1
244	225.00	.93200	1254.0	.4990-01	.6590-01	.7320-01	.9345	.4041-02	.2753-02	.3990	2.852	559.8
244	225.00	.93900	1261.0	.6330-01	.8430-01	.9390-01	.9345	.5185-02	.3497-02	.4960	3.519	562.9
245	238.00	.95300	1277.0	.8370-01	.1186	.1260	.9430	.6958-02	.4621-02	.5530	4.010	585.0
245	238.00	.96700	1281.0	.1011	.1446	.1539	.9430	.8498-02	.5585-02	.6550	4.823	587.4
245	238.00	.98000	1285.0	.1120	.1618	.1726	.9430	.9534-02	.6183-02	.7070	5.199	590.3
243	256.00	.11500	1094.0	.1163	.1528	.1693	.9345	.9360-02	.6430-02	.9490	6.998	557.4
243	256.00	.12800	1095.0	.5690-01	.7150-01	.7770-01	.9345	.4295-02	.3149-02	.5450	4.070	531.9
243	256.00	.14600	1096.0	.3820-01	.4820-01	.5250-01	.9345	.2903-02	.2114-02	.3590	2.678	535.1
244	256.00	.20000	1097.0	.7970-01	.1017	.1113	.9345	.6145-02	.4400-02	.7150	5.317	542.1
244	256.00	.40000	1098.0	.7710-01	.9880-01	.1082	.9345	.5974-02	.4257-02	.6840	4.837	544.0
244	256.00	.60000	1099.0	.7170-01	.9180-01	.1005	.9345	.5549-02	.3957-02	.6370	4.699	543.7
244	256.00	.80000	1100.0	.7150-01	.9320-01	.1029	.9345	.5684-02	.3947-02	.5960	4.405	553.7
244	256.00	.87500	1101.0	.6440-01	.8450-01	.9350-01	.9345	.5165-02	.3554-02	.5260	3.694	556.8
244	270.00	.50000-01	1102.0	.2202	.2942	.3100	.9424	.1712-01	.1216-01	1.705	12.53	564.5
244	270.00	.10000+00	1103.0	.1949	.2585	.2720	.9424	.1502-01	.1076-01	1.540	11.34	561.6
244	270.00	.11500	1104.0	.1122	.1470	.1626	.9345	.8979-02	.6198-02	.9240	6.821	555.6
244	270.00	.14600	1105.0	.4540-01	.5720-01	.6220-01	.9345	.3434-02	.2504-02	.4270	3.187	534.2
244	270.00	.72400	1234.0	.7250-01	.9310-01	.1021	.9345	.5639-02	.4001-02	.6360	4.731	545.8
244	270.00	.74000	1240.0	.7530-01	.9740-01	.1071	.9345	.5914-02	.4156-02	.6450	4.812	549.4
244	270.00	.93200	1255.0	.7680-01	.1008	.1116	.9345	.6161-02	.4239-02	.6270	4.521	556.8
244	270.00	.95300	1110.0	.1846	.2562	.2708	.9430	.1495-01	.1019-01	1.285	9.014	578.6
244	270.00	.96700	1111.0	.1698	.2386	.2529	.9430	.1396-01	.9378-02	1.146	8.081	582.4
244	270.00	.98000	1112.0	.1731	.2448	.2599	.9430	.1435-01	.9558-02	1.149	8.042	584.4
244	270.00	.99400	1113.0	.1857	.2615	.2772	.9430	.1531-01	.1026-01	1.248	8.794	583.0

IH72, OTS CLEAN, LEFT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
244	284.00	.11500	1114.0	.1196	.1572	.1742	.9345	.9617-02	.6605-02	.9730	7.180	557.3
244	284.00	.14600	1116.0	.4800-01	.6050-01	.6580-01	.9345	.3632-02	.2653-02	.4540	3.391	533.5
244	284.00	.20000	1117.0	.8310-01	.1058	.1157	.9345	.6387-02	.4587-02	.7510	5.589	540.9
244	284.00	.40000	1118.0	.7580-01	.9670-01	.1058	.9345	.5841-02	.4186-02	.6820	4.842	541.8
244	284.00	.87500	1121.0	.8100-01	.1055	.1165	.9345	.6433-02	.4472-02	.6770	4.814	553.2
245	302.00	.98000	1282.0	.1789	.2500	.2646	.9431	.1461-01	.9882-02	1.225	8.959	580.7
244	315.00	.95300	1125.0	.8090-01	.1033	.1129	.9345	.6237-02	.4470-02	.7280	5.413	541.8
244	315.00	.98000	1127.0	.7640-01	.9750-01	.1066	.9345	.5889-02	.4217-02	.6860	5.013	542.1
244	315.00	.99400	1128.0	.1004	.1296	.1425	.9345	.7867-02	.5545-02	.8670	6.382	548.3
244	315.00	.70000	1129.0	.8830-01	.1140	.1253	.9345	.6917-02	.4876-02	.7630	5.690	548.2
244	315.00	.72400	1235.0	.8690-01	.1118	.1227	.9345	.6774-02	.4800-02	.7600	5.752	546.3
244	315.00	.74000	1241.0	.8430-01	.1086	.1192	.9345	.6585-02	.4652-02	.7320	5.593	547.4
244	315.00	.75000	1245.0	.8450-01	.1093	.1203	.9345	.6642-02	.4667-02	.7240	5.568	549.5
244	315.00	.77100	1250.0	.9280-01	.1204	.1327	.9345	.7326-02	.5123-02	.7860	6.212	551.2
244	315.00	.80000	1130.0	.1006	.1314	.1452	.9345	.8017-02	.5554-02	.8340	6.268	554.4
244	315.00	.87500	1131.0	.8030-01	.1050	.1161	.9345	.6410-02	.4432-02	.6630	4.694	555.1
244	315.00	1265.0	1132.0	.8460-01	.1108	.1226	.9345	.6770-02	.4671-02	.6950	4.935	555.8
244	315.00	1074.0	1256.0	.8480-01	.1109	.1226	.9345	.6770-02	.4682-02	.7010	4.977	555.0
244	315.00	1076.0	1133.0	.1811	.2526	.2671	.9431	.1475-01	.1000-01	1.246	8.711	580.1
244	315.00	1077.0	1134.0	.1774	.2480	.2624	.9431	.1449-01	.9795-02	1.212	8.578	580.9
244	315.00	1057.0	1135.0	.1817	.2544	.2693	.9431	.1487-01	.1003-01	1.237	8.668	581.4
244	315.00	1058.0	1136.0	.1948	.2762	.2931	.9431	.1619-01	.1076-01	1.285	8.910	585.1
244	330.00	.72400	1236.0	.7930-01	.1035	.1144	.9345	.6315-02	.4377-02	.6580	5.082	554.3
244	335.00	.43000-01	1212.0	.2314	.3113	.3283	.9425	.1813-01	.1278-01	1.754	12.87	567.4
244	335.00	.50000-01	1213.0	.2091	.2790	.2938	.9425	.1623-01	.1155-01	1.622	11.92	564.2
244	335.00	.57000-01	1214.0	.2004	.2654	.2790	.9425	.1541-01	.1107-01	1.592	11.72	560.8
244	335.00	.63000-01	1215.0	.1892	.2497	.2624	.9425	.1449-01	.1045-01	1.517	11.18	559.4
244	335.00	.90000-01	1216.0	.1878	.2479	.2605	.9425	.1438-01	.1037-01	1.507	11.11	559.4
245	342.00	.95300	1275.0	.1613	.2279	.2417	.9431	.1335-01	.8906-02	1.073	7.344	584.2
245	342.00	.96700	1279.0	.1680	.2379	.2524	.9431	.1394-01	.9276-02	1.112	7.776	584.8
245	342.00	.98000	1283.0	.2081	.2956	.3137	.9431	.1733-01	.1149-01	1.369	9.395	585.6
245	342.00	.99400	1287.0	.1757	.2477	.2625	.9431	.1450-01	.9701-02	1.176	8.075	583.5
243	355.00	.95300	1016.0	.1377	.1926	.2038	.9431	.1127-01	.7613-02	.9410	6.619	581.3
243	355.00	.96700	1017.0	.2035	.2877	.3050	.9431	.1687-01	.1125-01	1.356	9.577	584.4
243	355.00	.99400	1019.0	.1531	.2116	.2234	.9431	.1235-01	.8468-02	1.080	7.535	577.4

IH72, OTS CLEAN, LEFT SRB HI/HREF (RVZL34)

LEFT SRB

PARAMETRIC DATA

ALPHA = -5.000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
210	-5.060	-9.100	4.020	72.10	748.0	176.8	.4620	5.228	2619.	.2193-03	.1424-06	4.034
211	-5.060	-9.100	4.020	72.10	749.0	176.9	.4630	5.232	2620.	.2193-03	.1424-06	4.035
212	-5.060	-9.100	4.020	72.30	749.0	177.0	.4630	5.243	2621.	.2197-03	.1425-06	4.039

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
210	.5091-01	.1145-01
211	.5094-01	.1145-01
212	.5099-01	.1144-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
210	.00000	.11500	1000.0	.2265	.2863	.3342	.9228	.1701-01	.1153-01	2.068	15.16	569.1
210	.00000	.20000	1001.0	.1135	.1393	.1589	.9228	.8093-02	.5778-02	1.167	8.656	546.4
210	.00000	.25000	1003.0	.8180-01	.1003	.1143	.9228	.5819-02	.4163-02	.8450	6.272	545.4
210	.00000	.30000	1004.0	.9780-01	.1199	.1366	.9228	.6954-02	.4980-02	1.013	7.523	544.9
210	.00000	.50000	1006.0	.1210	.1513	.1751	.9228	.8916-02	.6160-02	1.151	8.361	561.5
210	.00000	.55000	1007.0	.1530	.1923	.2236	.9228	.1138-01	.7789-02	1.424	10.33	565.5
210	.00000	.60000	1008.0	.1475	.1840	.2125	.9228	.1082-01	.7512-02	1.419	10.46	559.5
210	.00000	.65000	1009.0	.1463	.1822	.2103	.9228	.1071-01	.7448-02	1.413	10.35	558.6
210	.00000	.70000	1010.0	.1248	.1551	.1788	.9228	.9102-02	.6352-02	1.214	9.267	557.2
211	.00000	.72400	1232.0	.5270-01	.6430-01	.7300-01	.9228	.3717-02	.2685-02	.5590	4.286	540.6
211	.00000	.74000	1242.0	.1229	.1523	.1750	.9228	.8914-02	.6262-02	1.216	9.460	554.4
210	.00000	.75000	1011.0	.1252	.1559	.1799	.9228	.9159-02	.6373-02	1.210	9.558	558.5
211	.00000	.77100	1251.0	.1839	.2341	.2749	.9228	.1400-01	.9367-02	1.635	12.72	574.1
210	.00000	.80000	1012.0	.1539	.1935	.2248	.9228	.1145-01	.7837-02	1.435	10.91	565.3
210	.00000	.87500	1013.0	.8790-01	.1095	.1263	.9228	.6431-02	.4476-02	.8500	6.008	558.4
211	.00000	.93200	1257.0	.7230-01	.8900-01	.1018	.9228	.5186-02	.3685-02	.7360	5.206	549.1
211	4.3800	.96500	1220.0	.1451	.1882	.2033	.9374	.1036-01	.7392-02	1.210	8.953	585.0
211	4.3800	.97500	1221.0	.2453	.3299	.3611	.9374	.1839-01	.1250-01	1.825	13.34	602.6

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN, LEFT SRB HI/HREF

(RVZL34)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
211	4.3800	.98500	1222.0	.2394	.3193	.3485	.9374	.1775-01	.1220-01	1.825	13.23	599.1
211	4.3800	.99500	1223.0	.2217	.2928	.3184	.9374	.1622-01	.1129-01	1.742	12.61	594.5
211	5.0000	.50000-01	1209.0	.6800-01	.8150-01	.8610-01	.9365	.4383-02	.3466-02	.7880	5.955	521.5
211	5.0000	.90000-01	1210.0	.2746	.3546	.3848	.9365	.1960-01	.1399-01	2.322	16.91	582.7
211	5.0000	10.000	1211.0	.2986	.3835	.4154	.9365	.2116-01	.1521-01	2.572	18.76	579.6
211	20.000	.96500	1224.0	.1329	.1720	.1896	.9341	.9659-02	.6771-02	1.117	8.131	583.8
211	20.000	.97500	1225.0	.1959	.2583	.2873	.9341	.1463-01	.9978-02	1.546	11.20	593.7
211	20.000	.98500	1226.0	.2144	.2820	.3133	.9341	.1596-01	.1092-01	1.704	12.44	592.6
211	35.000	10.000	1208.0	.2249	.2840	.3163	.9306	.1611-01	.1145-01	2.059	15.10	568.9
211	40.000	.96500	1228.0	.9440-01	.1197	.1338	.9304	.6818-02	.4809-02	.8510	6.273	571.8
211	40.000	.97500	1229.0	.1034	.1325	.1489	.9304	.7587-02	.5265-02	.8970	6.595	578.3
211	40.000	.99500	1231.0	.1421	.1830	.2062	.9304	.1051-01	.7240-02	1.215	8.854	580.9
210	45.000	.11500	1020.0	.1386	.1732	.2013	.9220	.1025-01	.7054-02	1.321	9.726	561.1
210	45.000	.14300	1021.0	.8500-01	.1048	.1206	.9220	.6138-02	.4328-02	.8570	6.344	550.4
210	45.000	.17100	1022.0	.1512	.1883	.2183	.9220	.1111-01	.7698-02	1.462	10.78	558.5
210	45.000	.20000	1023.0	.1304	.1613	.1860	.9220	.9468-02	.6637-02	1.296	9.579	553.1
210	45.000	.30000	1024.0	.9740-01	.1190	.1358	.9220	.6913-02	.4959-02	1.024	7.614	541.8
210	45.000	.40000	1025.0	.7030-01	.8700-01	.1003	.9220	.5107-02	.3581-02	.7000	5.006	553.0
210	45.000	.55000	1027.0	.1531	.1923	.2246	.9220	.1144-01	.7792-02	1.428	10.42	565.2
210	45.000	.65000	1029.0	.1469	.1837	.2138	.9220	.1088-01	.7478-02	1.395	10.20	561.8
210	45.000	.70000	1030.0	.1330	.1662	.1931	.9220	.9834-02	.6772-02	1.270	9.509	560.9
210	45.000	.80000	1031.0	.1287	.1607	.1866	.9220	.9499-02	.6553-02	1.234	9.242	560.1
210	45.000	.87500	1032.0	.5080-01	.6240-01	.7140-01	.9220	.3636-02	.2588-02	.5240	3.738	545.9
210	45.000	.92500	1033.0	.3240-01	.3970-01	.4540-01	.9220	.2311-02	.1648-02	.3350	2.387	544.9
211	45.000	.93200	1258.0	.3710-01	.4530-01	.5170-01	.9220	.2634-02	.1891-02	.3910	2.880	541.8
212	45.000	.93900	1264.0	.3480-01	.4260-01	.4880-01	.9220	.2488-02	.1773-02	.3610	2.643	545.7
210	50.000	.95300	1034.0	.7790-01	.9810-01	.1102	.9288	.5611-02	.3964-02	.7200	5.096	566.8
210	50.000	.96700	1035.0	.8340-01	.1058	.1194	.9288	.6077-02	.4247-02	.7520	5.349	571.3
210	50.000	.98000	1036.0	.8580-01	.1096	.1241	.9288	.6320-02	.4370-02	.7550	5.289	575.6
211	65.000	.43000-01	1200.0	.3323	.4284	.4962	.9264	.2528-01	.1692-01	2.824	20.58	581.9
211	65.000	.50000-01	1201.0	.2562	.3236	.3696	.9264	.1882-01	.1305-01	2.344	17.19	569.1
211	65.000	.57000-01	1202.0	.2458	.3087	.3512	.9264	.1789-01	.1252-01	2.300	16.90	565.0
211	65.000	.63000-01	1203.0	.2071	.2606	.2968	.9264	.1512-01	.1055-01	1.924	14.13	566.4
211	65.000	.90000-01	1204.0	.1838	.2314	.2636	.9264	.1343-01	.9364-02	1.706	12.52	566.6
211	65.000	.10000+00	1205.0	.2336	.2944	.3358	.9264	.1711-01	.1190-01	2.153	15.80	567.7
212	76.000	.12700	1291.0	.1297	.1629	.1900	.9220	.9690-02	.6615-02	1.218	8.805	565.0
212	76.000	.13400	1292.0	.1388	.1760	.2069	.9220	.1055-01	.7079-02	1.257	8.994	571.7
212	76.000	.17300	1293.0	.1346	.1663	.1916	.9220	.9769-02	.6866-02	1.351	9.920	552.5
212	76.000	.18000	1294.0	.1239	.1527	.1755	.9220	.8949-02	.6320-02	1.257	9.153	550.3
212	76.000	.18600	1295.0	.1136	.1397	.1604	.9220	.8177-02	.5792-02	1.160	8.540	548.8
212	76.000	.19300	1296.0	.1248	.1534	.1761	.9220	.8978-02	.6365-02	1.278	9.439	548.4
212	76.000	.20000	1297.0	.1351	.1659	.1901	.9220	.9693-02	.6891-02	1.393	10.26	547.0
210	90.000	.00000	1038.0	.4680-01	.5770-01	.4920-01	.9870	.2506-02	.2383-02	.4730	3.469	549.8

IH72. OTS CLEAN. LEFT SRB HI/HREF (RVZL34)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
210	90.000	.20000-02	1039.0	.5079	.6894	.6570	.9569	.3345-01	.2586-01	3.676	26.03	606.2
210	90.000	.10000+00	1042.0	.3074	.4027	.4782	.9245	.2434-01	.1565-01	2.474	17.95	590.3
210	90.000	.13400	1045.0	.2269	.2993	.3645	.9220	.1856-01	.1155-01	1.787	12.94	593.7
210	90.000	.17300	1046.0	.1056	.1304	.1502	.9220	.7649-02	.5377-02	1.057	7.817	551.8
210	90.000	.19000	1047.0	.1153	.1403	.1597	.9220	.8129-02	.5869-02	1.232	9.175	538.4
210	90.000	.18600	1048.0	.1364	.1681	.1933	.9220	.9840-02	.6944-02	1.377	10.20	550.0
210	90.000	.19300	1049.0	.1255	.1539	.1762	.9220	.8971-02	.6388-02	1.295	9.608	545.7
210	90.000	.20000	1050.0	.1034	.1263	.1442	.9220	.7343-02	.5264-02	1.085	8.066	542.2
210	90.000	.25000	1051.0	.7200-01	.8750-01	.9950-01	.9220	.5068-02	.3668-02	.7750	5.774	537.1
210	90.000	.30000	1052.0	.5580-01	.6750-01	.7640-01	.9220	.3890-02	.2842-02	.6160	4.601	531.7
210	90.000	.50000	1054.0	.6550-01	.8010-01	.9160-01	.9220	.4662-02	.3334-02	.6830	4.989	543.5
210	90.000	.60000	1055.0	.9350-01	.1144	.1308	.9220	.6661-02	.4759-02	.9730	7.178	543.9
210	90.000	.75000	1057.0	.8210-01	.1013	.1165	.9220	.5934-02	.4179-02	.8250	6.425	551.0
210	90.000	.80000	1058.0	.3420-01	.4130-01	.4680-01	.9220	.2382-02	.1739-02	.3760	2.809	532.2
210	90.000	.95300	1061.0	.5590-01	.7010-01	.8040-01	.9249	.4095-02	.2844-02	.5230	3.722	564.4
210	90.000	.98000	1063.0	.3950-01	.4970-01	.5710-01	.9249	.2906-02	.2011-02	.3670	2.592	565.9
210	90.000	.99400	1064.0	.4680-01	.5930-01	.6840-01	.9249	.3482-02	.2385-02	.4250	3.005	570.1
210	135.00	.14300	1066.0	.9640-01	.1199	.1390	.9220	.7074-02	.4907-02	.9350	6.896	557.8
210	135.00	.17100	1067.0	.7300-01	.8850-01	.1006	.9220	.5120-02	.3715-02	.7900	5.893	535.7
210	135.00	.20000	1068.0	.3940-01	.4740-01	.5360-01	.9220	.2726-02	.2005-02	.4420	3.311	527.8
210	135.00	.30000	1069.0	.2070-01	.2480-01	.2800-01	.9220	.1423-02	.1054-02	.2370	1.778	523.6
210	135.00	.50000	1070.0	.6620-01	.8080-01	.9210-01	.9220	.4690-02	.3372-02	.7010	5.126	540.6
210	135.00	.60000	1071.0	.6210-01	.7550-01	.8580-01	.9220	.4368-02	.3162-02	.6680	4.978	537.1
210	135.00	.70000	1072.0	.3880-01	.4750-01	.5420-01	.9220	.2761-02	.1978-02	.4070	3.077	542.5
211	135.00	.72400	1237.0	.4070-01	.4960-01	.5650-01	.9220	.2878-02	.2071-02	.4310	3.331	540.4
211	135.00	.74000	1243.0	.4260-01	.5200-01	.5930-01	.9220	.3019-02	.2170-02	.4510	3.506	540.9
211	135.00	.75000	1246.0	.4220-01	.5150-01	.5870-01	.9220	.2991-02	.2150-02	.4460	3.458	541.1
211	135.00	.77100	1252.0	.4940-01	.6040-01	.6890-01	.9220	.3512-02	.2518-02	.5200	3.981	542.4
210	135.00	.80000	1073.0	.5220-01	.6370-01	.7270-01	.9220	.3700-02	.2658-02	.5510	4.165	541.2
211	135.00	.93200	1259.0	.1880-01	.2300-01	.2620-01	.9220	.1337-02	.9594-03	.1980	1.460	541.9
212	135.00	.93900	1265.0	.2210-01	.2710-01	.3100-01	.9220	.1582-02	.1128-02	.2300	1.684	545.4
212	138.00	.96700	1268.0	.3470-01	.4400-01	.5100-01	.9245	.2601-02	.1767-02	.3120	2.180	572.8
212	138.00	.99400	1272.0	.2040-01	.2590-01	.3010-01	.9245	.1534-02	.1039-02	.1820	1.275	573.7
212	162.00	.95300	1267.0	.9600-02	.1230-01	.1420-01	.9259	.7262-03	.4911-03	.8400-01	.6070	577.6
212	162.00	.96700	1269.0	.2220-01	.2840-01	.3270-01	.9259	.1670-02	.1134-02	.1970	1.422	575.9
212	162.00	.98000	1271.0	.1650-01	.2110-01	.2430-01	.9259	.1240-02	.8426-03	.1460	1.053	575.9
210	180.00	.20000	1078.0	.5740-01	.6950-01	.7890-01	.9220	.4016-02	.2922-02	.6260	4.673	534.1
210	180.00	.40000	1079.0	.4240-01	.5150-01	.5860-01	.9220	.2983-02	.2160-02	.4570	3.287	536.7
210	180.00	.60000	1080.0	.5120-01	.6220-01	.7070-01	.9220	.3601-02	.2606-02	.5510	4.105	537.0
210	180.00	.70000	1081.0	.4870-01	.5960-01	.6810-01	.9220	.3467-02	.2481-02	.5090	3.887	543.1
211	180.00	.74000	1238.0	.5330-01	.6510-01	.7420-01	.9220	.3782-02	.2713-02	.5610	4.298	542.0
210	180.00	.75000	1082.0	.5180-01	.6330-01	.7240-01	.9220	.3684-02	.2636-02	.5410	4.303	543.3
211	180.00	.77100	1247.0	.4820-01	.5890-01	.6730-01	.9220	.3429-02	.2453-02	.5030	3.976	543.6

IH72, OTS CLEAN, LEFT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
210	180.00	.80000	1083.0	.4240-01	.5210-01	.5970-01	.9220	.3040-02	.2160-02	.4360	3.286	546.7
211	180.00	.93900	1260.0	.2530-01	.3120-01	.3580-01	.9220	.1826-02	.1287-02	.2540	1.834	551.0
210	180.00	.96700	1085.0	.2720-01	.3460-01	.3940-01	.9277	.2008-02	.1385-02	.2410	1.704	574.0
210	180.00	.98000	1086.0	.3180-01	.4060-01	.4630-01	.9277	.2355-02	.1620-02	.2810	1.986	575.1
210	180.00	.99400	1087.0	.2600-01	.3330-01	.3810-01	.9277	.1937-02	.1324-02	.2270	1.591	577.3
212	198.00	.95300	1276.0	.9400-02	.1190-01	.1340-01	.9304	.6826-03	.4773-03	.8300-01	.6090	575.8
212	198.00	.96700	1280.0	.4280-01	.5470-01	.6150-01	.9304	.3137-02	.2181-02	.3730	2.708	578.0
210	225.00	.11500	1088.0	.1266	.1591	.1855	.9223	.9446-02	.6444-02	1.180	8.666	565.3
210	225.00	.17700	1090.0	.6560-01	.7960-01	.9040-01	.9223	.4600-02	.3339-02	.7090	5.283	536.2
210	225.00	.60000	1091.0	.4680-01	.5690-01	.6470-01	.9223	.3294-02	.2380-02	.4990	3.718	538.6
210	225.00	.70000	1092.0	.3420-01	.4170-01	.4750-01	.9223	.2420-02	.1741-02	.3610	2.715	540.9
211	225.00	.72400	1233.0	.2920-01	.3550-01	.4030-01	.9223	.2055-02	.1487-02	.3130	2.421	538.1
211	225.00	.74000	1239.0	.3140-01	.3830-01	.4350-01	.9223	.2218-02	.1601-02	.3350	2.599	539.4
211	225.00	.75000	1244.0	.2700-01	.3290-01	.3750-01	.9223	.1908-02	.1378-02	.2890	2.253	539.3
211	225.00	.77100	1248.0	.2780-01	.3390-01	.3860-01	.9223	.1967-02	.1418-02	.2960	2.303	540.0
210	225.00	.80000	1093.0	.3260-01	.3990-01	.4550-01	.9223	.2318-02	.1661-02	.3410	2.530	543.3
211	225.00	.93200	1254.0	.1850-01	.2280-01	.2620-01	.9223	.1333-02	.9443-03	.1890	1.356	549.0
211	225.00	.93900	1261.0	.2110-01	.2610-01	.3000-01	.9223	.1529-02	.1074-02	.2100	1.500	552.9
212	238.00	.95300	1277.0	.7430-01	.9490-01	.1014	.9384	.5172-02	.3787-02	.6520	4.749	576.9
212	238.00	.96700	1281.0	.1000+00	.1285	.1375	.9384	.7014-02	.5097-02	.8610	6.361	580.3
212	238.00	.98000	1285.0	.1050	.1356	.1454	.9384	.7416-02	.5354-02	.8890	6.558	583.2
210	256.00	.11500	1094.0	.1494	.1886	.2186	.9239	.1113-01	.7607-02	1.369	10.05	568.4
210	256.00	.12800	1095.0	.7330-01	.8900-01	.1002	.9239	.5102-02	.3730-02	.7900	5.886	536.6
210	256.00	.14600	1096.0	.6270-01	.7600-01	.8540-01	.9239	.4349-02	.3190-02	.6820	5.086	534.7
211	256.00	.20000	1097.0	.1086	.1302	.1454	.9239	.7405-02	.5530-02	1.244	9.337	523.7
211	256.00	.40000	1098.0	.8010-01	.9820-01	.1113	.9239	.5667-02	.4082-02	.8320	5.881	544.9
211	256.00	.60000	1099.0	.7260-01	.8850-01	.9990-01	.9239	.5091-02	.3698-02	.7700	5.690	540.5
211	256.00	.80000	1100.0	.5140-01	.6300-01	.7140-01	.9239	.3636-02	.2617-02	.5320	3.949	545.3
211	256.00	.87500	1101.0	.4150-01	.5130-01	.5840-01	.9239	.2977-02	.2113-02	.4150	2.921	552.4
211	270.00	.50000-01	1102.0	.2666	.3411	.3544	.9433	.1805-01	.1358-01	2.327	16.99	577.3
211	270.00	.10000+00	1103.0	.2495	.3183	.3305	.9433	.1684-01	.1271-01	2.204	16.11	575.3
211	270.00	.11500	1104.0	.1487	.1874	.2160	.9247	.1100-01	.7573-02	1.371	10.06	567.7
211	270.00	.14600	1105.0	.6160-01	.7480-01	.8400-01	.9247	.4278-02	.3137-02	.6630	4.940	537.3
211	270.00	.72400	1234.0	.6220-01	.7580-01	.8530-01	.9247	.4343-02	.3169-02	.6610	4.937	540.0
211	270.00	.74000	1240.0	.6410-01	.7840-01	.8840-01	.9247	.4500-02	.3267-02	.6720	5.027	543.0
211	270.00	.93200	1255.0	.5740-01	.7120-01	.8100-01	.9247	.4124-02	.2926-02	.5680	4.100	554.6
211	270.00	.95300	1110.0	.1351	.1758	.1822	.9442	.9279-02	.6879-02	1.111	7.763	587.2
211	270.00	.96700	1111.0	.1588	.2076	.2152	.9442	.1096-01	.8091-02	1.290	9.064	589.3
211	270.00	.98000	1112.0	.1697	.2230	.2314	.9442	.1179-01	.8644-02	1.353	9.432	592.2
211	270.00	.99400	1113.0	.1686	.2218	.2302	.9442	.1172-01	.8586-02	1.339	9.394	592.7
211	284.00	.11500	1114.0	.1544	.1957	.2256	.9252	.1149-01	.7863-02	1.393	10.21	571.5
211	284.00	.14600	1116.0	.6840-01	.8310-01	.9300-01	.9252	.4736-02	.3482-02	.7360	5.488	537.2
211	284.00	.20000	1117.0	.9710-01	.1192	.1343	.9252	.6841-02	.4947-02	1.000	7.419	546.5

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN, LEFT SRB HI/HREF

(RVZL34)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
211	284.00	.40000	1118.0	.8520-01	.1047	.1181	.9252	.6018-02	.4341-02	.8720	6.173	547.9
211	284.00	.87500	1121.0	.7570-01	.9420-01	.1072	.9252	.5463-02	.3857-02	.7340	5.205	558.3
212	302.00	.98000	1282.0	.2100	.2791	.2862	.9463	.1459-01	.1071-01	1.621	11.76	597.8
211	315.00	.92500	1122.0	.1725	.2194	.2536	.9252	.1292-01	.8784-02	1.537	11.25	573.7
211	315.00	.95300	1125.0	.1065	.1311	.1481	.9252	.7545-02	.5427-02	1.083	8.020	549.2
211	315.00	.98000	1127.0	.9580-01	.1174	.1323	.9252	.6737-02	.4879-02	.9910	7.232	545.6
211	315.00	.99400	1128.0	.9030-01	.1108	.1249	.9252	.6361-02	.4598-02	.9290	6.843	546.7
211	315.00	.70000	1129.0	.8590-01	.1057	.1194	.9252	.6082-02	.4374-02	.8720	6.504	549.3
211	315.00	.72400	1235.0	.8820-01	.1083	.1220	.9252	.6216-02	.4494-02	.9080	6.875	546.6
211	315.00	.74000	1241.0	.8680-01	.1066	.1201	.9252	.6118-02	.4423-02	.8940	6.835	546.6
211	315.00	.75000	1245.0	.9010-01	.1108	.1251	.9252	.6373-02	.4588-02	.9170	7.055	548.8
211	315.00	.77100	1250.0	.9450-01	.1167	.1322	.9252	.6733-02	.4812-02	.9440	7.455	552.5
211	315.00	.80000	1130.0	.1297	.1621	.1850	.9252	.9423-02	.6604-02	1.236	9.256	561.5
211	315.00	.87500	1131.0	.9980-01	.1250	.1428	.9252	.7273-02	.5086-02	.9470	6.680	562.5
211	315.00	1265.0	1132.0	.8650-01	.1075	.1223	.9252	.6229-02	.4406-02	.8430	5.979	557.4
211	315.00	1074.0	1256.0	.8810-01	.1093	.1241	.9252	.6324-02	.4486-02	.8640	6.135	556.0
211	315.00	1076.0	1133.0	.1908	.2527	.2601	.9456	.1325-01	.9716-02	1.483	10.28	596.1
211	315.00	1077.0	1134.0	.2160	.2876	.2962	.9456	.1508-01	.1100-01	1.656	11.62	598.2
211	315.00	1057.0	1135.0	.2256	.3014	.3105	.9456	.1581-01	.1149-01	1.713	11.89	599.7
211	315.00	1058.0	1136.0	.2352	.3173	.3273	.9456	.1667-01	.1198-01	1.732	11.89	604.1
211	330.00	.72400	1236.0	.1257	.1558	.1774	.9246	.9038-02	.6404-02	1.241	9.584	554.9
211	335.00	.43000-01	1212.0	.3495	.4552	.4776	.9422	.2433-01	.1780-01	2.871	20.86	587.4
211	335.00	.50000-01	1213.0	.3110	.4033	.4228	.9422	.2154-01	.1584-01	2.593	18.86	585.1
211	335.00	.57000-01	1214.0	.3048	.3930	.4115	.9422	.2096-01	.1553-01	2.589	18.87	581.9
211	335.00	.63000-01	1215.0	.2833	.3658	.3832	.9422	.1952-01	.1443-01	2.395	17.44	582.7
211	335.00	.90000-01	1216.0	.2868	.3701	.3877	.9422	.1975-01	.1461-01	2.430	17.70	582.4
212	342.00	.95300	1275.0	.1811	.2380	.2507	.9420	.1278-01	.9237-02	1.448	9.869	592.4
212	342.00	.96700	1279.0	.2101	.2794	.2951	.9420	.1505-01	.1071-01	1.617	11.24	598.2
212	342.00	.98000	1283.0	.2526	.3433	.3644	.9420	.1858-01	.1288-01	1.826	12.39	607.4
212	342.00	.99400	1287.0	.2779	.3753	.3978	.9420	.2028-01	.1417-01	2.044	13.89	604.9
210	355.00	.95300	1016.0	.1540	.2009	.2148	.9394	.1094-01	.7839-02	1.255	8.794	588.3
210	355.00	.96700	1017.0	.1983	.2651	.2855	.9394	.1453-01	.1009-01	1.498	10.50	600.0
210	355.00	.98000	1018.0	.2784	.3772	.4078	.9394	.2076-01	.1417-01	2.024	14.06	605.6
210	355.00	.99400	1019.0	.2461	.3273	.3518	.9394	.1791-01	.1253-01	1.891	13.07	597.4

LEFT SRB

PARAMETRIC DATA

ALPHA = .0000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
204	-.1000-01	-8.900	4.020	72.30	746.0	176.2	.4640	5.244	2615.	.2207-03	.1419-06	4.069
205	-.1000-01	-8.900	4.020	72.30	748.0	176.8	.4630	5.242	2619.	.2199-03	.1424-06	4.046
206	.0000	-9.000	4.020	72.30	750.0	177.2	.4630	5.243	2622.	.2194-03	.1427-06	4.032

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
204	.5097-01	.1140-01
205	.5098-01	.1143-01
206	.5100-01	.1145-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
204	.00000	.11500	1000.0	.1759	.2260	.2689	.9220	.1371-01	.8964-02	1.507	11.00	577.5
204	.00000	.20000	1001.0	.7530-01	.9320-01	.1075	.9220	.5481-02	.3838-02	.7450	5.509	551.6
204	.00000	.25000	1003.0	.7180-01	.8880-01	.1024	.9220	.5219-02	.3661-02	.7130	5.279	550.8
204	.00000	.30000	1004.0	.8880-01	.1101	.1271	.9220	.6477-02	.4527-02	.8740	6.465	552.5
204	.00000	.40000	1005.0	.6200-02	.7600-02	.8600-02	.9220	.4400-03	.3180-03	.6700-01	.4810	536.0
204	.00000	.50000	1006.0	.5530-01	.6830-01	.7880-01	.9220	.4015-02	.2817-02	.5490	4.009	550.8
204	.00000	.55000	1007.0	.7880-01	.9800-01	.1135	.9220	.5786-02	.4016-02	.7640	5.563	555.6
204	.00000	.60000	1008.0	.9590-01	.1202	.1401	.9220	.7141-02	.4887-02	.9010	6.631	561.4
204	.00000	.65000	1009.0	.9640-01	.1207	.1406	.9220	.7167-02	.4912-02	.9080	6.644	560.8
204	.00000	.70000	1010.0	.9080-01	.1145	.1340	.9220	.6832-02	.4626-02	.8330	6.332	565.5
205	.00000	.72400	1232.0	.6260-01	.7670-01	.8770-01	.9220	.4472-02	.3193-02	.6510	4.985	544.3
205	.00000	.74000	1242.0	.9510-01	.1193	.1391	.9220	.7093-02	.4847-02	.8940	6.915	564.0
204	.00000	.75000	1011.0	.9250-01	.1178	.1390	.9220	.7085-02	.4715-02	.8200	6.432	571.8
205	.00000	.77100	1251.0	.1281	.1644	.1955	.9220	.9968-02	.6528-02	1.104	8.570	579.2
204	.00000	.80000	1012.0	.1114	.1437	.1716	.9220	.8747-02	.5679-02	.9420	7.105	579.9
204	.00000	.87500	1013.0	.7080-01	.8990-01	.1059	.9220	.5398-02	.3606-02	.6320	4.439	570.4
205	.00000	.93200	1257.0	.6980-01	.8720-01	.1014	.9220	.5169-02	.3557-02	.6660	4.684	561.1
205	4.3800	.96500	1220.0	.1049	.1388	.1573	.9317	.8020-02	.5349-02	.8200	6.040	594.9

IH72, OTS CLEAN, LEFT SRB HI/HREF (RVZL35)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
205	4.3800	.97500	1221.0	.1790	.2447	.2825	.9317	.1440-01	.9125-02	1.272	9.268	608.9
205	4.3800	.98500	1222.0	.1674	.2276	.2621	.9317	.1336-01	.8535-02	1.207	8.715	606.9
205	4.3800	.99500	1223.0	.1511	.2046	.2351	.9317	.1199-01	.7702-02	1.101	7.928	605.4
205	5.0000	.50000-01	1209.0	.7230-01	.8720-01	.9460-01	.9310	.4823-02	.3687-02	.8090	6.093	529.0
205	5.0000	.90000-01	1210.0	.1990	.2603	.2949	.9310	.1503-01	.1014-01	1.611	11.69	589.5
205	5.0000	10.000	1211.0	.2291	.2999	.3398	.9310	.1733-01	.1168-01	1.851	13.43	589.8
205	20.000	.96500	1224.0	.8310-01	.1088	.1246	.9294	.6353-02	.4238-02	.6720	4.879	589.7
205	20.000	.97500	1225.0	.1072	.1438	.1674	.9294	.8533-02	.5465-02	.8030	5.792	601.5
205	20.000	.98500	1226.0	.1151	.1533	.1774	.9294	.9045-02	.5870-02	.8830	6.425	597.9
205	35.000	10.000	1208.0	.1949	.2517	.2904	.9272	.1480-01	.9934-02	1.646	11.99	582.6
205	40.000	.96500	1228.0	.9360-01	.1198	.1372	.9272	.6997-02	.4774-02	.8190	6.022	576.8
205	40.000	.97500	1229.0	.9660-01	.1248	.1440	.9272	.7339-02	.4926-02	.8160	5.984	582.6
205	40.000	.99500	1231.0	.9510-01	.1228	.1415	.9272	.7213-02	.4851-02	.8070	5.879	582.0
204	45.000	.11500	1020.0	.1067	.1359	.1605	.9220	.8182-02	.5439-02	.9430	6.908	572.2
204	45.000	.14300	1021.0	.9090-01	.1139	.1328	.9220	.6768-02	.4631-02	.8530	6.278	561.5
204	45.000	.17100	1022.0	.9620-01	.1216	.1427	.9220	.7273-02	.4904-02	.8760	6.429	567.1
204	45.000	.20000	1023.0	.8160-01	.1019	.1185	.9220	.6040-02	.4157-02	.7750	5.715	559.1
204	45.000	.30000	1024.0	.6130-01	.7550-01	.8680-01	.9220	.4423-02	.3125-02	.6190	4.592	547.5
204	45.000	.40000	1025.0	.4160-01	.5140-01	.5910-01	.9220	.3014-02	.2120-02	.4160	2.982	549.4
204	45.000	.55000	1027.0	.1080	.1367	.1605	.9220	.8180-02	.5507-02	.9800	7.144	567.7
204	45.000	.65000	1029.0	.1174	.1508	.1794	.9220	.9144-02	.5985-02	1.008	7.310	577.3
204	45.000	.70000	1030.0	.1072	.1385	.1656	.9220	.8441-02	.5465-02	.9020	6.686	580.7
204	45.000	.80000	1031.0	.1285	.1655	.1974	.9220	.1006-01	.6549-02	1.091	8.099	579.0
204	45.000	.87500	1032.0	.5880-01	.7320-01	.8490-01	.9220	.4327-02	.2998-02	.5670	4.027	556.4
204	45.000	.92500	1033.0	.4510-01	.5570-01	.6420-01	.9220	.3270-02	.2296-02	.4480	3.182	550.3
205	45.000	.93200	1258.0	.4650-01	.5690-01	.6500-01	.9220	.3315-02	.2370-02	.4850	3.568	543.6
206	45.000	.93900	1264.0	.4960-01	.6090-01	.6980-01	.9220	.3561-02	.2531-02	.5120	3.745	547.8
204	50.000	.95300	1034.0	.9600-01	.1223	.1405	.9264	.7160-02	.4892-02	.8470	5.984	572.4
204	50.000	.96700	1035.0	.8330-01	.1069	.1233	.9264	.6286-02	.4244-02	.7170	5.084	576.8
204	50.000	.98000	1036.0	.1011	.1299	.1501	.9264	.7653-02	.5153-02	.8660	6.058	577.7
205	65.000	.43000-01	1200.0	.2774	.3742	.4528	.9251	.2309-01	.1414-01	2.045	14.74	603.7
205	65.000	.50000-01	1201.0	.2225	.2915	.3447	.9251	.1757-01	.1134-01	1.794	13.02	590.2
205	65.000	.57000-01	1202.0	.2099	.2739	.3227	.9251	.1645-01	.1070-01	1.716	12.47	588.0
205	65.000	.63000-01	1203.0	.1682	.2179	.2554	.9251	.1302-01	.8577-02	1.408	10.25	584.2
205	65.000	.90000-01	1204.0	.1291	.1669	.1954	.9251	.9964-02	.6581-02	1.086	7.905	583.3
205	65.000	.10000+00	1205.0	.1790	.2313	.2706	.9251	.1380-01	.9127-02	1.511	11.00	582.8
206	76.000	.12700	1291.0	.1324	.1677	.1971	.9220	.1005-01	.6752-02	1.203	8.662	572.0
206	76.000	.13400	1292.0	.1464	.1881	.2238	.9220	.1141-01	.7465-02	1.263	8.994	580.9
206	76.000	.17300	1293.0	.9000-01	.1120	.1298	.9220	.6621-02	.4591-02	.8760	6.413	559.3
206	76.000	.18000	1294.0	.9200-01	.1142	.1320	.9220	.6734-02	.4690-02	.9040	6.561	557.3
206	76.000	.18600	1295.0	.8990-01	.1116	.1290	.9220	.6580-02	.4583-02	.8840	6.476	557.3
206	76.000	.19300	1296.0	.8510-01	.1055	.1219	.9220	.6218-02	.4342-02	.8420	6.192	556.2
206	76.000	.20000	1297.0	.7820-01	.9660-01	.1112	.9220	.5671-02	.3988-02	.7860	5.774	552.9

IH72, OTS CLEAN, LEFT SRB HI/HREF

(RVZL35)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
204	90.000	.00000	1038.0	.5160-01	.6450-01	.5440-01	.9870	.2773-02	.2628-02	.4870	3.552	560.3
204	90.000	.20000-02	1039.0	.4978	.7298	.6823	.9575	.3478-01	.2537-01	2.976	20.85	628.4
204	90.000	.10000+00	1042.0	.2499	.3334	.4014	.9247	.2046-01	.1274-01	1.896	13.71	596.8
204	90.000	.13400	1045.0	.2088	.2886	.3673	.9220	.1872-01	.1064-01	1.434	10.30	610.9
204	90.000	.17300	1046.0	.1113	.1414	.1667	.9220	.8494-02	.5670-02	.9920	7.268	570.7
204	90.000	.18000	1047.0	.1124	.1400	.1623	.9220	.8271-02	.5729-02	1.084	7.999	556.4
204	90.000	.18600	1048.0	.1051	.1325	.1553	.9220	.7913-02	.5355-02	.9640	7.079	565.7
204	90.000	.19300	1049.0	.8950-01	.1121	.1306	.9220	.6654-02	.4563-02	.8450	6.220	560.6
204	90.000	.20000	1050.0	.7340-01	.9130-01	.1058	.9220	.5393-02	.3741-02	.7100	5.242	555.8
204	90.000	.25000	1051.0	.5040-01	.6220-01	.7160-01	.9220	.3648-02	.2569-02	.5050	3.741	549.1
204	90.000	.30000	1052.0	.4240-01	.5210-01	.5980-01	.9220	.3049-02	.2160-02	.4310	3.197	546.2
204	90.000	.50000	1054.0	.6860-01	.8540-01	.9900-01	.9220	.5044-02	.3494-02	.6510	4.799	556.4
204	90.000	.60000	1055.0	.6480-01	.8060-01	.9320-01	.9220	.4752-02	.3303-02	.6300	4.621	555.0
204	90.000	.70000	1056.0	.2510-01	.3080-01	.3530-01	.9220	.1801-02	.1278-02	.2560	1.887	545.4
204	90.000	.75000	1057.0	.6710-01	.8420-01	.9820-01	.9220	.5006-02	.3417-02	.6260	4.851	562.4
204	90.000	.80000	1058.0	.3200-01	.3890-01	.4430-01	.9220	.2257-02	.1629-02	.3400	2.537	536.7
204	90.000	.95300	1061.0	.5020-01	.6380-01	.7370-01	.9251	.3759-02	.2558-02	.4470	3.172	570.8
204	90.000	.98000	1063.0	.4800-01	.6050-01	.6960-01	.9251	.3547-02	.2448-02	.4420	3.120	565.3
204	90.000	.99400	1064.0	.5310-01	.6720-01	.7750-01	.9251	.3952-02	.2705-02	.4790	3.390	568.5
204	135.00	.14300	1066.0	.1221	.1558	.1843	.9220	.9392-02	.6223-02	1.073	7.852	573.3
204	135.00	.17100	1067.0	.9900-01	.1247	.1460	.9220	.7441-02	.5045-02	.9110	6.696	565.0
204	135.00	.20000	1068.0	.8460-01	.1053	.1220	.9220	.6219-02	.4310-02	.8160	6.025	556.2
204	135.00	.30000	1069.0	.5160-01	.6320-01	.7220-01	.9220	.3681-02	.2629-02	.5350	3.979	542.1
204	135.00	.50000	1070.0	.8620-01	.1067	.1231	.9220	.6275-02	.4392-02	.8510	6.194	551.8
204	135.00	.60000	1071.0	.7270-01	.8960-01	.1029	.9220	.5244-02	.3708-02	.7360	5.458	547.1
204	135.00	.70000	1072.0	.4550-01	.5610-01	.6450-01	.9220	.3288-02	.2319-02	.4580	3.451	548.2
205	135.00	.72400	1237.0	.4400-01	.5380-01	.6140-01	.9220	.3128-02	.2245-02	.4640	3.585	541.5
205	135.00	.74000	1243.0	.4510-01	.5520-01	.6300-01	.9220	.3211-02	.2301-02	.4740	3.683	542.3
205	135.00	.75000	1246.0	.4460-01	.5450-01	.6230-01	.9220	.3175-02	.2276-02	.4690	3.633	542.2
205	135.00	.77100	1252.0	.5370-01	.6560-01	.7490-01	.9220	.3817-02	.2735-02	.5630	4.317	542.3
204	135.00	.80000	1073.0	.5670-01	.6950-01	.7970-01	.9220	.4061-02	.2887-02	.5810	4.386	544.5
205	135.00	.93200	1259.0	.2990-01	.3620-01	.4100-01	.9220	.2093-02	.1522-02	.3260	2.408	534.2
206	135.00	.93900	1265.0	.2840-01	.3450-01	.3920-01	.9220	.1998-02	.1449-02	.3080	2.268	537.2
204	135.00	.95300	1074.0	.4760-01	.5900-01	.6640-01	.9268	.3385-02	.2427-02	.4680	3.338	552.8
206	138.00	.96700	1268.0	.5640-01	.6930-01	.7760-01	.9270	.3956-02	.2874-02	.5750	4.070	549.9
206	138.00	.99400	1272.0	.3790-01	.4710-01	.5310-01	.9270	.2708-02	.1933-02	.3700	2.607	558.6
206	162.00	.95300	1267.0	.6960-01	.8630-01	.9570-01	.9297	.4880-02	.3550-02	.6870	5.001	556.6
206	162.00	.96700	1269.0	.6470-01	.8060-01	.8950-01	.9297	.4566-02	.3299-02	.6270	4.572	560.1
206	162.00	.98000	1271.0	.6530-01	.8190-01	.9130-01	.9297	.4656-02	.3331-02	.6170	4.478	564.7
204	180.00	.20000	1078.0	.7480-01	.9200-01	.1056	.9220	.5384-02	.3813-02	.7600	5.636	546.4
204	180.00	.40000	1079.0	.6400-01	.7890-01	.9070-01	.9220	.4624-02	.3261-02	.6440	4.602	548.2
204	180.00	.60000	1080.0	.6120-01	.7520-01	.8630-01	.9220	.4398-02	.3118-02	.6230	4.624	545.8
204	180.00	.70000	1081.0	.6090-01	.7530-01	.8680-01	.9220	.4422-02	.3102-02	.6040	4.595	550.8

IH72, OTS CLEAN, LEFT SRB HI/HREF (RVZL35)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
205	180.00	.74000	1238.0	.6550-01	.8030-01	.9200-01	.9220	.4689-02	.3338-02	.6770	5.175	545.7
204	180.00	.75000	1082.0	.6350-01	.7850-01	.9050-01	.9220	.4613-02	.3236-02	.6300	4.997	550.9
205	180.00	.77100	1247.0	.6300-01	.7730-01	.8870-01	.9220	.4521-02	.3211-02	.6470	5.100	546.9
204	180.00	.80000	1083.0	.6130-01	.7580-01	.8750-01	.9220	.4458-02	.3123-02	.6060	4.563	551.5
205	180.00	.93900	1260.0	.4870-01	.5980-01	.6850-01	.9220	.3494-02	.2481-02	.5000	3.610	546.9
204	180.00	.96700	1085.0	.7420-01	.9500-01	.1053	.9324	.5368-02	.3780-02	.6440	4.538	575.4
204	180.00	.98000	1086.0	.7740-01	.9970-01	.1109	.9324	.5652-02	.3947-02	.6590	4.654	578.7
204	180.00	.99400	1087.0	.7800-01	.1011	.1128	.9324	.5749-02	.3975-02	.6490	4.545	582.4
206	198.00	.95300	1276.0	.7090-01	.9160-01	.9990-01	.9356	.5098-02	.3616-02	.6010	4.401	584.0
206	198.00	.96700	1280.0	.7490-01	.9790-01	.1074	.9356	.5475-02	.3822-02	.6110	4.407	590.1
204	225.00	.11500	1088.0	.1568	.2035	.2420	.9233	.1233-01	.7991-02	1.298	9.452	583.2
204	225.00	.17700	1090.0	.8710-01	.1082	.1244	.9233	.6339-02	.4438-02	.8460	6.250	577.0
204	225.00	.60000	1091.0	.6730-01	.8320-01	.9530-01	.9233	.4859-02	.3428-02	.6660	4.924	551.5
204	225.00	.70000	1092.0	.6440-01	.8020-01	.9230-01	.9233	.4704-02	.3283-02	.6210	4.633	556.3
205	225.00	.72400	1233.0	.6930-01	.8600-01	.9860-01	.9233	.5027-02	.3535-02	.6830	5.238	555.0
205	225.00	.74000	1239.0	.6620-01	.8200-01	.9390-01	.9233	.4788-02	.3377-02	.6580	5.063	553.6
205	225.00	.75000	1244.0	.6810-01	.8480-01	.9750-01	.9233	.4973-02	.3473-02	.6610	5.114	558.0
205	225.00	.77100	1248.0	.6930-01	.8670-01	.1001	.9233	.5103-02	.3532-02	.6580	5.063	561.9
204	225.00	.80000	1093.0	.7490-01	.9470-01	.1103	.9233	.5622-02	.3816-02	.6790	4.986	567.6
205	225.00	.93200	1254.0	.4510-01	.5680-01	.6600-01	.9233	.3366-02	.2298-02	.4160	2.964	567.3
205	225.00	.93900	1261.0	.5710-01	.7230-01	.8430-01	.9233	.4295-02	.2912-02	.5190	3.670	570.1
206	238.00	.95300	1277.0	.7340-01	.1007	.1069	.9421	.5454-02	.3743-02	.5180	3.705	611.7
206	238.00	.96700	1281.0	.9260-01	.1306	.1396	.9421	.7119-02	.4725-02	.6100	4.417	621.0
206	238.00	.98000	1285.0	.1123	.1598	.1712	.9421	.8733-02	.5725-02	.7220	5.220	624.1
204	256.00	.11500	1094.0	.1403	.1824	.2155	.9244	.1099-01	.7151-02	1.155	8.403	584.2
204	256.00	.12800	1095.0	.7300-01	.9020-01	.1026	.9244	.5230-02	.3723-02	.7280	5.388	550.1
204	256.00	.14600	1096.0	.5450-01	.6740-01	.7680-01	.9244	.3913-02	.2778-02	.5400	3.993	551.4
205	256.00	.20000	1097.0	.1119	.1365	.1539	.9244	.7844-02	.5703-02	1.181	8.786	541.2
205	256.00	.40000	1098.0	.8250-01	.1024	.1168	.9244	.5955-02	.4204-02	.8080	5.681	556.1
205	256.00	.60000	1099.0	.7560-01	.9360-01	.1067	.9244	.5437-02	.3854-02	.7480	5.490	554.2
205	256.00	.80000	1100.0	.6670-01	.8530-01	.9950-01	.9244	.5072-02	.3401-02	.5840	4.264	576.7
205	256.00	.87500	1101.0	.4250-01	.5480-01	.6440-01	.9244	.3283-02	.2168-02	.3610	2.504	581.8
205	270.00	.50000-01	1102.0	.2545	.3389	.3549	.9432	.1810-01	.1297-01	1.948	14.09	598.1
205	270.00	.10000+00	1103.0	.2344	.3101	.3244	.9432	.1654-01	.1195-01	1.831	13.25	595.1
205	270.00	.11500	1104.0	.1392	.1786	.2087	.9246	.1064-01	.7097-02	1.203	8.777	578.8
205	270.00	.14600	1105.0	.6440-01	.7940-01	.9010-01	.9246	.4592-02	.3283-02	.6500	4.812	550.3
205	270.00	.72400	1234.0	.6360-01	.7990-01	.9190-01	.9246	.4683-02	.3241-02	.5940	4.380	565.0
205	270.00	.74000	1240.0	.6160-01	.7830-01	.9080-01	.9246	.4628-02	.3140-02	.5510	4.063	572.7
205	270.00	.93200	1255.0	.7140-01	.9290-01	.1097	.9246	.5594-02	.3642-02	.5890	4.186	586.5
205	270.00	.95300	1110.0	.1006	.1465	.1547	.9442	.7886-02	.5130-02	.6130	4.200	628.7
205	270.00	.96700	1111.0	.1705	.2533	.2685	.9442	.1369-01	.8693-02	.9950	6.842	633.8
205	270.00	.98000	1112.0	.2014	.3027	.3216	.9442	.1640-01	.1027-01	1.148	7.828	636.5
205	270.00	.99400	1113.0	.1915	.2845	.3016	.9442	.1538-01	.9762-02	1.117	7.681	633.9

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN, LEFT SRB HI/HREF

(RVZL35)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
205	284.00	.11500	1114.0	.1474	.1902	.2234	.9244	.1139-01	.7513-02	1.248	9.096	582.1
205	284.00	.14600	1116.0	.6550-01	.8070-01	.9150-01	.9244	.4666-02	.3339-02	.6640	4.916	549.5
205	284.00	.20000	1117.0	.9120-01	.1133	.1294	.9244	.6595-02	.4647-02	.8900	6.563	556.9
205	284.00	.40000	1118.0	.8460-01	.1053	.1203	.9244	.6131-02	.4315-02	.8230	5.803	557.4
205	284.00	.80000	1120.0	.5060-01	.6480-01	.7560-01	.9244	.3854-02	.2580-02	.4410	3.279	577.2
206	302.00	.98000	1282.0	.2322	.3525	.3838	.9422	.1957-01	.1184-01	1.301	9.243	640.2
205	315.00	.92500	1122.0	.1447	.1858	.2190	.9233	.1116-01	.7378-02	1.249	9.113	579.0
205	315.00	.95300	1125.0	.8740-01	.1083	.1241	.9233	.6326-02	.4454-02	.8640	6.384	554.3
205	315.00	.98000	1127.0	.7550-01	.9350-01	.1071	.9233	.5461-02	.3851-02	.7490	5.447	553.7
205	315.00	.99400	1128.0	.7520-01	.9300-01	.1063	.9233	.5422-02	.3836-02	.7530	5.529	552.1
205	315.00	.70000	1129.0	.6140-01	.7610-01	.8720-01	.9233	.4447-02	.3128-02	.6050	4.501	554.8
205	315.00	.72400	1235.0	.6540-01	.8130-01	.9340-01	.9233	.4762-02	.3336-02	.6390	4.815	556.7
205	315.00	.74000	1241.0	.6850-01	.8550-01	.9860-01	.9233	.5025-02	.3490-02	.6560	4.980	560.4
205	315.00	.75000	1245.0	.7020-01	.8830-01	.1023	.9233	.5216-02	.3580-02	.6550	4.995	565.4
205	315.00	.80000	1130.0	.9750-01	.1256	.1483	.9233	.7562-02	.4971-02	.8330	6.173	580.8
205	315.00	.87500	1131.0	.1052	.1383	.1662	.9233	.8474-02	.5361-02	.8380	5.821	592.1
205	315.00	1265.0	1132.0	.1005	.1308	.1558	.9233	.7945-02	.5123-02	.8280	5.785	586.7
205	315.00	1074.0	1256.0	.1021	.1328	.1581	.9233	.8059-02	.5208-02	.8450	5.906	586.1
205	315.00	1076.0	1133.0	.1534	.2258	.2486	.9403	.1268-01	.7818-02	.9120	6.213	631.7
205	315.00	1077.0	1134.0	.2051	.3046	.3363	.9403	.1715-01	.1045-01	1.197	8.255	633.8
205	315.00	1057.0	1135.0	.2408	.3557	.3920	.9403	.1999-01	.1228-01	1.422	9.723	632.5
205	315.00	1058.0	1136.0	.2212	.3284	.3625	.9403	.1848-01	.1128-01	1.293	8.748	633.7
205	330.00	.72400	1236.0	.9440-01	.1182	.1371	.9227	.6990-02	.4814-02	.8950	6.884	562.4
205	335.00	.43000-01	1212.0	.2821	.3758	.4142	.9361	.2112-01	.1438-01	2.158	15.60	598.2
205	335.00	.50000-01	1213.0	.2581	.3410	.3745	.9361	.1909-01	.1316-01	2.026	14.67	594.4
205	335.00	.57000-01	1214.0	.2445	.3213	.3522	.9361	.1795-01	.1246-01	1.950	14.14	591.8
205	335.00	.63000-01	1215.0	.2178	.2855	.3126	.9361	.1594-01	.1110-01	1.752	12.71	590.5
205	335.00	.90000-01	1216.0	.2168	.2845	.3116	.9361	.1588-01	.1105-01	1.738	12.61	591.1
206	342.00	.95300	1275.0	.1567	.2168	.2437	.9356	.1243-01	.7993-02	1.081	7.292	614.8
206	342.00	.96700	1279.0	.1757	.2481	.2814	.9356	.1435-01	.8963-02	1.152	7.918	621.5
206	342.00	.98000	1283.0	.2179	.3091	.3514	.9356	.1792-01	.1111-01	1.412	9.512	623.0
206	342.00	.99400	1287.0	.2369	.3353	.3808	.9356	.1942-01	.1208-01	1.543	10.40	622.3
204	355.00	.95300	1016.0	.1273	.1726	.1958	.9333	.9979-02	.6490-02	.9230	6.419	603.4
204	355.00	.96700	1017.0	.2603	.3490	.3938	.9333	.2007-01	.1327-01	1.947	13.65	599.0
204	355.00	.98000	1018.0	.2355	.3316	.3838	.9333	.1956-01	.1200-01	1.545	10.67	617.0
204	355.00	.99400	1019.0	.1905	.2646	.3041	.9333	.1550-01	.9711-02	1.293	8.869	612.5

LEFT SRB

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 4.020

•••TEST CONDITIONS•••

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
201	-.1400	.0000	4.020	72.20	736.0	173.8	.4630	5.241	2597.	.2236-03	.1399-06	4.150
202	-.1400	.0000	4.020	72.30	743.0	175.5	.4640	5.248	2609.	.2218-03	.1413-06	4.097
203	-.1400	.0000	4.020	72.30	744.0	175.8	.4630	5.243	2612.	.2212-03	.1415-06	4.082

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
201	.5086-01	.1131-01
202	.5096-01	.1137-01
203	.5095-01	.1139-01

•••TEST DATA•••

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
201	.00000	.11500	1000.0	.1404	.1751	.2031	.9220	.1033-01	.7140-02	1.326	9.821	549.8
201	.00000	.20000	1001.0	.4120-01	.5060-01	.5810-01	.9220	.2953-02	.2097-02	.4150	3.092	537.6
201	.00000	.25000	1003.0	.4240-01	.5220-01	.6000-01	.9220	.3052-02	.2157-02	.4220	3.142	539.9
201	.00000	.30000	1004.0	.5720-01	.7040-01	.8090-01	.9220	.4116-02	.2907-02	.5680	4.229	540.1
201	.00000	.40000	1005.0	.5020-01	.6220-01	.7190-01	.9220	.3657-02	.2552-02	.4850	3.479	545.7
201	.00000	.50000	1006.0	.9280-01	.1162	.1354	.9220	.6885-02	.4718-02	.8600	6.272	553.3
201	.00000	.55000	1007.0	.1085	.1367	.1600	.9220	.8136-02	.5517-02	.9830	7.156	557.4
201	.00000	.60000	1008.0	.9170-01	.1147	.1334	.9220	.6784-02	.4665-02	.8570	6.337	551.9
201	.00000	.65000	1009.0	.9050-01	.1129	.1311	.9220	.6669-02	.4602-02	.8520	6.263	550.5
201	.00000	.70000	1010.0	.7550-01	.9430-01	.1096	.9220	.5575-02	.3841-02	.7090	5.426	551.0
202	.00000	.72400	1232.0	.4190-01	.5220-01	.6050-01	.9220	.3081-02	.2136-02	.4040	3.076	553.6
202	.00000	.74000	1242.0	.7310-01	.9060-01	.1047	.9220	.5333-02	.3723-02	.7140	5.562	550.8
201	.00000	.75000	1011.0	.7240-01	.9040-01	.1051	.9220	.5347-02	.3681-02	.6780	5.374	551.4
202	.00000	.77100	1251.0	.7480-01	.9320-01	.1080	.9220	.5502-02	.3813-02	.7190	5.653	554.0
201	.00000	.80000	1012.0	.9300-01	.1174	.1376	.9220	.6998-02	.4729-02	.8370	6.384	558.6
201	.00000	.87500	1013.0	.5270-01	.6610-01	.7710-01	.9220	.3922-02	.2681-02	.4860	3.442	554.3
202	.00000	.93200	1257.0	.4830-01	.5990-01	.6920-01	.9220	.3528-02	.2463-02	.4720	3.340	550.8
202	4.3800	.96500	1220.0	.1063	.1378	.1535	.9329	.7821-02	.5416-02	.8780	6.510	580.5

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN, LEFT SRB HI/HREF

(RVZL36)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
202	4.3800	.97500	1221.0	.1920	.2534	.2845	.9329	.1450-01	.9787-02	1.501	11.05	589.2
202	4.3800	.98500	1222.0	.1730	.2272	.2545	.9329	.1297-01	.8813-02	1.371	9.997	587.1
202	4.3800	.99500	1223.0	.1591	.2073	.2314	.9329	.1179-01	.8108-02	1.294	9.426	583.0
202	5.0000	.50000-01	1209.0	.4740-01	.5700-01	.6150-01	.9321	.3133-02	.2416-02	.5320	4.023	522.3
202	5.0000	.90000-01	1210.0	.1788	.2250	.2478	.9321	.1263-01	.9113-02	1.651	12.15	561.5
202	5.0000	10.000	1211.0	.1961	.2470	.2722	.9321	.1387-01	.9995-02	1.803	13.27	562.2
202	20.000	.96500	1224.0	.1122	.1449	.1611	.9329	.8207-02	.5716-02	.9390	6.856	578.3
202	20.000	.97500	1225.0	.1584	.2055	.2288	.9329	.1166-01	.8073-02	1.308	9.540	580.5
202	20.000	.98500	1226.0	.1708	.2206	.2452	.9329	.1249-01	.8702-02	1.430	10.50	578.3
202	35.000	10.000	1208.0	.1718	.2145	.2355	.9321	.1200-01	.8755-02	1.632	12.04	556.2
202	40.000	.96500	1228.0	.7700-01	.9780-01	.1078	.9328	.5495-02	.3922-02	.6840	5.050	568.3
202	40.000	.97500	1229.0	.6420-01	.8130-01	.8960-01	.9328	.4564-02	.3270-02	.5750	4.252	566.7
202	40.000	.99500	1231.0	.1041	.1323	.1459	.9328	.7433-02	.5304-02	.9240	6.777	568.4
201	45.000	.11500	1020.0	.9100-01	.1139	.1326	.9220	.6746-02	.4629-02	.8470	6.260	552.7
201	45.000	.14300	1021.0	.6820-01	.8430-01	.9710-01	.9220	.4939-02	.3466-02	.6670	4.956	543.1
201	45.000	.17100	1022.0	.7690-01	.9540-01	.1102	.9220	.5605-02	.3910-02	.7420	5.505	545.8
201	45.000	.20000	1023.0	.6800-01	.8410-01	.9690-01	.9220	.4928-02	.3460-02	.6660	4.950	543.0
201	45.000	.30000	1024.0	.4110-01	.5040-01	.5770-01	.9220	.2935-02	.2089-02	.4160	3.099	536.5
201	45.000	.40000	1025.0	.4560-01	.5660-01	.6530-01	.9220	.3322-02	.2321-02	.4420	3.174	545.2
201	45.000	.55000	1027.0	.1212	.1537	.1808	.9220	.9197-02	.6163-02	1.072	7.839	561.6
201	45.000	.65000	1029.0	.1002	.1261	.1475	.9220	.7500-02	.5096-02	.9120	6.686	556.6
201	45.000	.70000	1030.0	.8480-01	.1067	.1246	.9220	.6336-02	.4315-02	.7760	5.827	555.7
201	45.000	.80000	1031.0	.7940-01	.9900-01	.1149	.9220	.5841-02	.4037-02	.7500	5.647	549.8
201	45.000	.87500	1032.0	.3100-01	.3840-01	.4440-01	.9220	.2258-02	.1575-02	.2990	2.132	545.8
201	45.000	.92500	1033.0	.2110-01	.2610-01	.3020-01	.9220	.1537-02	.1071-02	.2020	1.439	546.5
202	45.000	.93200	1258.0	.2150-01	.2650-01	.3050-01	.9220	.1552-02	.1096-02	.2160	1.586	545.6
203	45.000	.93900	1264.0	.2210-01	.2750-01	.3180-01	.9220	.1619-02	.1127-02	.2150	1.571	552.9
201	50.000	.95300	1034.0	.5370-01	.6810-01	.7500-01	.9328	.3814-02	.2729-02	.4740	3.365	561.9
201	50.000	.96700	1035.0	.6560-01	.8320-01	.9170-01	.9328	.4664-02	.3335-02	.5780	4.132	562.1
201	50.000	.98000	1036.0	.5900-01	.7480-01	.8250-01	.9328	.4193-02	.2998-02	.5200	3.667	562.1
202	65.000	.43000-01	1200.0	.2519	.3220	.3578	.9321	.1823-01	.1284-01	2.189	16.03	572.1
202	65.000	.50000-01	1201.0	.1955	.2455	.2703	.9321	.1377-01	.9964-02	1.817	13.38	560.2
202	65.000	.57000-01	1202.0	.1856	.2319	.2547	.9321	.1298-01	.9459-02	1.761	12.99	556.5
202	65.000	.63000-01	1203.0	.1531	.1905	.2087	.9321	.1064-01	.7802-02	1.477	10.91	553.3
202	65.000	.90000-01	1204.0	.1286	.1601	.1756	.9321	.8947-02	.6552-02	1.235	9.127	554.1
202	65.000	.10000+00	1205.0	.1425	.1778	.1952	.9321	.9947-02	.7261-02	1.357	10.02	555.8
203	76.000	.12700	1291.0	.1090	.1363	.1585	.9220	.8075-02	.5553-02	1.032	7.483	558.2
203	76.000	.13400	1292.0	.1230	.1552	.1819	.9220	.9269-02	.6264-02	1.121	8.050	565.0
203	76.000	.17300	1293.0	.8110-01	.9990-01	.1147	.9220	.5845-02	.4132-02	.8180	6.026	546.0
203	76.000	.18000	1294.0	.7800-01	.9590-01	.1101	.9220	.5608-02	.3975-02	.7920	5.783	544.7
203	76.000	.18600	1295.0	.7120-01	.8730-01	.1001	.9220	.5098-02	.3626-02	.7290	5.380	543.0
203	76.000	.19300	1296.0	.6200-01	.7580-01	.8660-01	.9220	.4413-02	.3160-02	.6450	4.788	539.7
203	76.000	.20000	1297.0	.5460-01	.6660-01	.7590-01	.9220	.3866-02	.2784-02	.5770	4.274	536.6

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN, LEFT SRB HI/HREF

(RVZL36)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
201	90.000	.20000-02	1039.0	.4535	.6331	.5362	.9728	.2727-01	.2306-01	2.990	21.17	605.9
201	90.000	.10000+00	1042.0	.1858	.2393	.2670	.9320	.1358-01	.9448-02	1.554	11.39	571.1
201	90.000	.13400	1045.0	.1840	.2473	.3063	.9220	.1558-01	.9355-02	1.344	9.743	591.9
201	90.000	.17300	1046.0	.9500-01	.1196	.1399	.9220	.7113-02	.4831-02	.8640	6.376	556.7
201	90.000	.18000	1047.0	.7840-01	.9690-01	.1117	.9220	.5679-02	.3986-02	.7670	5.697	543.2
201	90.000	.18600	1048.0	.6850-01	.8520-01	.9870-01	.9220	.5018-02	.3484-02	.6540	4.850	547.8
201	90.000	.19300	1049.0	.5850-01	.7260-01	.8390-01	.9220	.4265-02	.2976-02	.5650	4.191	545.8
201	90.000	.20000	1050.0	.5580-01	.6920-01	.7990-01	.9220	.4062-02	.2839-02	.5410	4.013	545.1
201	90.000	.25000	1051.0	.3330-01	.4110-01	.4730-01	.9220	.2406-02	.1695-02	.3290	2.446	541.5
201	90.000	.30000	1052.0	.2760-01	.3380-01	.3870-01	.9220	.1967-02	.1401-02	.2800	2.085	536.0
201	90.000	.50000	1054.0	.4810-01	.5970-01	.6890-01	.9220	.3506-02	.2447-02	.4650	3.393	545.6
201	90.000	.60000	1055.0	.6540-01	.8120-01	.9390-01	.9220	.4774-02	.3327-02	.6290	4.638	546.3
201	90.000	.70000	1056.0	.8700-02	.1070-01	.1230-01	.9220	.6266-03	.4446-03	.8800-01	.6500	538.0
201	90.000	.75000	1057.0	.5200-01	.6500-01	.7550-01	.9220	.3839-02	.2645-02	.4880	3.801	551.1
201	90.000	.80000	1058.0	.2070-01	.2540-01	.2910-01	.9220	.1481-02	.1054-02	.2100	1.585	536.4
201	90.000	.95300	1061.0	.2280-01	.2870-01	.3150-01	.9327	.1603-02	.1158-02	.2070	1.476	557.1
201	90.000	.98000	1063.0	.4400-01	.5520-01	.6060-01	.9327	.3082-02	.2237-02	.4040	2.868	555.0
201	90.000	.99400	1064.0	.3440-01	.4360-01	.4810-01	.9327	.2448-02	.1748-02	.3020	2.145	562.6
201	135.00	.14300	1066.0	.9650-01	.1220	.1432	.9220	.7281-02	.4908-02	.8640	6.366	559.5
201	135.00	.20000	1068.0	.6010-01	.7470-01	.8650-01	.9220	.4401-02	.3055-02	.5730	4.250	547.9
201	135.00	.30000	1069.0	.3260-01	.4010-01	.4610-01	.9220	.2344-02	.1660-02	.3260	2.429	539.0
201	135.00	.50000	1070.0	.4980-01	.6200-01	.7190-01	.9220	.3655-02	.2533-02	.4740	3.451	548.6
201	135.00	.60000	1071.0	.4390-01	.5450-01	.6300-01	.9220	.3204-02	.2230-02	.4210	3.122	546.8
201	135.00	.70000	1072.0	.3040-01	.3810-01	.4440-01	.9220	.2258-02	.1548-02	.2820	2.122	553.2
202	135.00	.72400	1237.0	.3310-01	.4130-01	.4780-01	.9220	.2437-02	.1689-02	.3190	2.444	553.9
202	135.00	.74000	1243.0	.3720-01	.4630-01	.5370-01	.9220	.2738-02	.1895-02	.3570	2.756	554.3
202	135.00	.75000	1246.0	.3770-01	.4700-01	.5450-01	.9220	.2779-02	.1923-02	.3610	2.780	554.7
202	135.00	.77100	1252.0	.4200-01	.5230-01	.6070-01	.9220	.3092-02	.2139-02	.4020	3.060	554.7
201	135.00	.80000	1073.0	.4630-01	.5770-01	.6690-01	.9220	.3403-02	.2356-02	.4390	3.310	549.1
202	135.00	.93200	1259.0	.1310-01	.1620-01	.1860-01	.9220	.9484-03	.6697-03	.1320	.9700	545.5
203	135.00	.93900	1265.0	.1890-01	.2350-01	.2720-01	.9220	.1386-02	.9622-03	.1830	1.332	554.1
201	135.00	.95300	1074.0	.1020-01	.1310-01	.1450-01	.9326	.7350-03	.5189-03	.8800-01	.6200	566.9
203	138.00	.96700	1268.0	.2560-01	.3340-01	.3730-01	.9326	.1901-02	.1306-02	.2090	1.455	583.8
203	138.00	.99400	1272.0	.1380-01	.1800-01	.2010-01	.9326	.1026-02	.7037-03	.1120	.7810	584.4
203	162.00	.96700	1269.0	.3250-01	.4380-01	.4980-01	.9326	.2537-02	.1655-02	.2390	1.708	599.6
203	162.00	.98000	1271.0	.4900-01	.6620-01	.7550-01	.9326	.3845-02	.2496-02	.3570	2.542	601.0
201	180.00	.20000	1078.0	.3840-01	.4720-01	.5410-01	.9220	.2753-02	.1952-02	.3850	2.866	538.4
201	180.00	.40000	1079.0	.5680-01	.7080-01	.8220-01	.9220	.4179-02	.2891-02	.5380	3.843	549.5
201	180.00	.60000	1080.0	.5620-01	.7000-01	.8110-01	.9220	.4125-02	.2857-02	.5330	3.949	549.0
201	180.00	.70000	1081.0	.4050-01	.5070-01	.5910-01	.9220	.3004-02	.2058-02	.3750	2.850	553.2
202	180.00	.74000	1238.0	.4610-01	.5750-01	.6670-01	.9220	.3399-02	.2349-02	.4410	3.355	555.0
201	180.00	.75000	1082.0	.4680-01	.5870-01	.6850-01	.9220	.3481-02	.2380-02	.4310	3.416	554.2
202	180.00	.77100	1247.0	.4850-01	.6060-01	.7050-01	.9220	.3593-02	.2473-02	.4590	3.607	556.8

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
201	180.00	.80000	1083.0	.5020-01	.6300-01	.7350-01	.9220	.3737-02	.2551-02	.4610	3.466	554.7
202	180.00	.93900	1260.0	.4440-01	.5600-01	.6560-01	.9220	.3342-02	.2265-02	.4070	2.917	562.9
201	180.00	.96700	1085.0	.5490-01	.7330-01	.8290-01	.9326	.4217-02	.2793-02	.4100	2.875	588.6
201	180.00	.98000	1086.0	.5710-01	.7630-01	.8640-01	.9326	.4395-02	.2904-02	.4250	2.984	589.3
201	180.00	.99400	1087.0	.5610-01	.7530-01	.8550-01	.9326	.4349-02	.2854-02	.4120	2.873	591.2
203	198.00	.95300	1276.0	.2080-01	.2850-01	.3260-01	.9326	.1663-02	.1061-02	.1470	1.066	605.4
203	198.00	.96700	1280.0	.5140-01	.7070-01	.8130-01	.9326	.4142-02	.2617-02	.3570	2.549	607.7
201	225.00	.11500	1088.0	.1071	.1360	.1601	.9220	.8144-02	.5445-02	.9430	6.935	562.5
201	225.00	.17700	1090.0	.2390-01	.2920-01	.3330-01	.9220	.1692-02	.1217-02	.2490	1.862	531.0
201	225.00	.60000	1091.0	.4250-01	.5240-01	.6030-01	.9220	.3064-02	.2162-02	.4210	3.132	540.8
201	225.00	.70000	1092.0	.4400-01	.5480-01	.6350-01	.9220	.3228-02	.2236-02	.4170	3.121	549.0
202	225.00	.72400	1233.0	.4760-01	.5880-01	.6780-01	.9220	.3454-02	.2424-02	.4710	3.621	548.4
202	225.00	.74000	1239.0	.4800-01	.5940-01	.6840-01	.9220	.3488-02	.2447-02	.4750	3.668	548.4
202	225.00	.75000	1244.0	.4800-01	.5940-01	.6860-01	.9220	.3497-02	.2445-02	.4710	3.658	550.0
202	225.00	.77100	1248.0	.4370-01	.5420-01	.6270-01	.9220	.3194-02	.2225-02	.4250	3.287	551.6
201	225.00	.80000	1093.0	.4630-01	.5770-01	.6710-01	.9220	.3410-02	.2353-02	.4350	3.222	550.6
202	225.00	.93200	1254.0	.4320-01	.5400-01	.6280-01	.9220	.3201-02	.2203-02	.4090	2.932	556.8
202	225.00	.93900	1261.0	.5260-01	.6600-01	.7700-01	.9220	.3926-02	.2680-02	.4890	3.476	560.1
203	238.00	.95300	1277.0	.5780-01	.7660-01	.8640-01	.9326	.4401-02	.2946-02	.4470	3.226	592.4
203	238.00	.96700	1281.0	.6610-01	.8840-01	.1000+00	.9326	.5097-02	.3368-02	.4980	3.651	596.2
203	238.00	.98000	1285.0	.6960-01	.9370-01	.1065	.9326	.5424-02	.3546-02	.5130	3.758	599.2
201	256.00	.11500	1094.0	.9950-01	.1257	.1475	.9220	.7499-02	.5062-02	.8930	6.585	559.1
201	256.00	.12800	1095.0	.4380-01	.5360-01	.6130-01	.9220	.3117-02	.2226-02	.4470	3.334	534.8
201	256.00	.14600	1096.0	.2710-01	.3300-01	.3760-01	.9220	.1913-02	.1377-02	.2820	2.105	531.0
202	256.00	.20000	1097.0	.4380-01	.5230-01	.5870-01	.9220	.2990-02	.2233-02	.5110	3.850	514.0
202	256.00	.40000	1098.0	.5130-01	.6290-01	.7200-01	.9220	.3670-02	.2613-02	.5250	3.720	541.6
202	256.00	.60000	1099.0	.5690-01	.6970-01	.7980-01	.9220	.4068-02	.2899-02	.5840	4.315	541.1
202	256.00	.80000	1100.0	.4930-01	.6080-01	.6990-01	.9220	.3564-02	.2511-02	.4920	3.651	546.6
202	256.00	.87500	1101.0	.5400-01	.6690-01	.7730-01	.9220	.3938-02	.2750-02	.5280	3.720	550.7
202	270.00	.50000-01	1102.0	.1891	.2388	.2638	.9320	.1344-01	.9636-02	1.719	12.63	564.2
202	270.00	.10000+00	1103.0	.1647	.2068	.2278	.9320	.1161-01	.8394-02	1.532	11.28	560.1
202	270.00	.11500	1104.0	.9750-01	.1218	.1414	.9220	.7208-02	.4971-02	.9280	6.849	556.0
202	270.00	.14600	1105.0	.3100-01	.3770-01	.4290-01	.9220	.2184-02	.1581-02	.3320	2.478	532.8
202	270.00	.72400	1234.0	.4450-01	.5450-01	.6240-01	.9220	.3180-02	.2267-02	.4570	3.414	540.8
202	270.00	.74000	1240.0	.4720-01	.5790-01	.6650-01	.9220	.3387-02	.2403-02	.4790	3.585	543.2
202	270.00	.93200	1255.0	.4540-01	.5650-01	.6540-01	.9220	.3333-02	.2315-02	.4390	3.175	552.8
202	270.00	.95300	1110.0	.1372	.1770	.1967	.9327	.1002-01	.6992-02	1.156	8.119	577.3
202	270.00	.96700	1111.0	.1341	.1739	.1938	.9327	.9873-02	.6832-02	1.108	7.820	580.4
202	270.00	.98000	1112.0	.1353	.1763	.1970	.9327	.1004-01	.6896-02	1.101	7.712	582.9
202	270.00	.99400	1113.0	.1329	.1732	.1936	.9327	.9864-02	.6773-02	1.080	7.613	583.1
202	284.00	.11500	1114.0	.9820-01	.1228	.1429	.9220	.7281-02	.5002-02	.9260	6.827	557.5
202	284.00	.14600	1116.0	.2870-01	.3480-01	.3960-01	.9220	.2016-02	.1464-02	.3100	2.315	531.1
202	284.00	.20000	1117.0	.3670-01	.4460-01	.5080-01	.9220	.2586-02	.1868-02	.3890	2.906	534.1

IH72, OTS CLEAN, LEFT SRB HI/HREF (RVZL36)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
202	284.00	.40000	1118.0	.5180-01	.6350-01	.7270-01	.9220	.3707-02	.2639-02	.5310	3.770	541.5
202	284.00	.80000	1120.0	.5640-01	.6950-01	.7990-01	.9220	.4070-02	.2877-02	.5680	4.290	545.0
202	284.00	.87500	1121.0	.4600-01	.5690-01	.6560-01	.9220	.3345-02	.2342-02	.4520	3.222	549.4
203	302.00	.98000	1282.0	.1501	.1936	.2150	.9328	.1095-01	.7647-02	1.267	9.278	578.3
203	302.00	.99400	1286.0	.1443	.1871	.2084	.9328	.1062-01	.7351-02	1.194	8.316	581.5
202	315.00	.92500	1122.0	.1076	.1347	.1568	.9220	.7991-02	.5483-02	1.012	7.461	558.1
202	315.00	.95300	1125.0	.2610-01	.3180-01	.3610-01	.9220	.1841-02	.1332-02	.2790	2.080	533.4
202	315.00	.98000	1127.0	.4220-01	.5160-01	.5880-01	.9220	.2998-02	.2152-02	.4420	3.237	537.4
202	315.00	.99400	1128.0	.6760-01	.8310-01	.9540-01	.9220	.4864-02	.3444-02	.6830	5.038	544.3
202	315.00	.70000	1129.0	.6790-01	.8390-01	.9670-01	.9220	.4928-02	.3459-02	.6720	5.014	548.3
202	315.00	.72400	1235.0	.6920-01	.8550-01	.9840-01	.9220	.5013-02	.3527-02	.6890	5.215	547.2
202	315.00	.74000	1241.0	.6420-01	.7930-01	.9120-01	.9220	.4649-02	.3272-02	.6400	4.892	547.0
202	315.00	.75000	1245.0	.6530-01	.8070-01	.9300-01	.9220	.4741-02	.3325-02	.6450	4.959	548.7
202	315.00	.77100	1250.0	.5880-01	.7280-01	.8390-01	.9220	.4278-02	.2999-02	.5810	4.595	548.9
202	315.00	.80000	1130.0	.6590-01	.8180-01	.9450-01	.9220	.4813-02	.3360-02	.6440	4.849	550.8
202	315.00	.87500	1131.0	.5780-01	.7200-01	.8350-01	.9220	.4257-02	.2943-02	.5520	3.909	555.0
202	315.00	1265.0	1132.0	.5200-01	.6470-01	.7490-01	.9220	.3816-02	.2652-02	.5030	3.579	552.8
202	315.00	1074.0	1256.0	.5260-01	.6540-01	.7570-01	.9220	.3856-02	.2680-02	.5090	3.621	552.6
202	315.00	1076.0	1133.0	.1548	.2001	.2225	.9328	.1134-01	.7890-02	1.294	9.056	578.5
202	315.00	1077.0	1134.0	.1533	.1968	.2180	.9328	.1111-01	.7814-02	1.314	9.331	574.4
202	315.00	1057.0	1135.0	.1522	.1950	.2158	.9328	.1100-01	.7756-02	1.313	9.238	573.3
202	315.00	1058.0	1136.0	.1504	.1939	.2153	.9328	.1097-01	.7666-02	1.270	8.834	577.0
202	330.00	.72400	1236.0	.7280-01	.9020-01	.1042	.9220	.5310-02	.3711-02	.7140	5.525	550.2
202	335.00	.43000-01	1212.0	.2183	.2775	.3073	.9321	.1566-01	.1112-01	1.935	14.19	568.6
202	335.00	.50000-01	1213.0	.1843	.2330	.2574	.9321	.1311-01	.9390-02	1.667	12.25	565.1
202	335.00	.57000-01	1214.0	.1828	.2300	.2534	.9321	.1292-01	.9313-02	1.683	12.39	561.9
202	335.00	.63000-01	1215.0	.1719	.2159	.2376	.9321	.1211-01	.8761-02	1.598	11.77	560.2
202	335.00	.90000-01	1216.0	.1762	.2212	.2435	.9321	.1241-01	.8977-02	1.636	12.05	560.4
203	342.00	.95300	1275.0	.1170	.1541	.1729	.9329	.8809-02	.5961-02	.9210	6.287	589.5
203	342.00	.96700	1279.0	.1214	.1597	.1791	.9329	.9122-02	.6187-02	.9610	6.708	588.7
203	342.00	.98000	1283.0	.1860	.2456	.2759	.9329	.1406-01	.9477-02	1.453	9.947	590.6
203	342.00	.99400	1287.0	.1755	.2317	.2604	.9329	.1326-01	.8939-02	1.369	9.370	590.8
201	355.00	.95300	1016.0	.1062	.1394	.1561	.9329	.7939-02	.5402-02	.8350	5.869	581.0
201	355.00	.96700	1017.0	.1241	.1640	.1843	.9329	.9372-02	.6312-02	.9550	6.746	584.3
201	355.00	.98000	1018.0	.1887	.2534	.2872	.9329	.1460-01	.9597-02	1.382	9.671	591.5
201	355.00	.99400	1019.0	.1641	.2166	.2433	.9329	.1237-01	.8343-02	1.265	8.796	584.0

PARAMETRIC DATA

ALPHA = 5.000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
207	4.950	-9.000	4.020	72.20	750.0	177.2	.4630	5.234	2622.	.2191-03	.1426-06	4.027
208	4.960	-9.000	4.020	72.20	748.0	176.7	.4630	5.237	2618.	.2198-03	.1423-06	4.046
209	4.960	-8.900	4.020	72.10	748.0	176.7	.4620	5.230	2618.	.2195-03	.1423-06	4.040

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
207	.5096-01	.1146-01
208	.5096-01	.1143-01
209	.5092-01	.1144-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
207	.00000	.11500	1000.0	.1363	.1717	.2009	.9220	.1024-01	.6945-02	1.263	9.264	568.0
207	.00000	.20000	1001.0	.5290-01	.6530-01	.7510-01	.9220	.3828-02	.2698-02	.5340	3.952	551.8
207	.00000	.25000	1003.0	.5760-01	.7110-01	.8190-01	.9220	.4175-02	.2935-02	.5780	4.273	552.9
207	.00000	.30000	1004.0	.7220-01	.8940-01	.1032	.9220	.5259-02	.3679-02	.7160	5.290	555.1
207	.00000	.50000	1006.0	.4150-01	.5110-01	.5870-01	.9220	.2991-02	.2116-02	.4230	3.092	549.8
207	.00000	.55000	1007.0	.5280-01	.6540-01	.7550-01	.9220	.3849-02	.2690-02	.5220	3.804	555.7
207	.00000	.60000	1008.0	.4640-01	.5740-01	.6620-01	.9220	.3373-02	.2363-02	.4610	3.407	554.6
207	.00000	.65000	1009.0	.4570-01	.5640-01	.6500-01	.9220	.3311-02	.2327-02	.4580	3.364	553.0
207	.00000	.70000	1010.0	.3780-01	.4690-01	.5420-01	.9220	.2762-02	.1924-02	.3710	2.833	556.9
208	.00000	.72400	1232.0	.7780-01	.9780-01	.1141	.9220	.5816-02	.3965-02	.7270	5.507	564.5
208	.00000	.74000	1242.0	.4140-01	.5110-01	.5880-01	.9220	.2996-02	.2110-02	.4160	3.241	550.7
207	.00000	.75000	1011.0	.4260-01	.5310-01	.6170-01	.9220	.3143-02	.2171-02	.4110	3.239	560.7
208	.00000	.77100	1251.0	.7140-01	.8880-01	.1028	.9220	.5237-02	.3637-02	.6940	5.447	557.0
207	.00000	.80000	1012.0	.5190-01	.6500-01	.7570-01	.9220	.3859-02	.2645-02	.4920	3.742	563.9
207	.00000	.87500	1013.0	.6030-01	.7590-01	.8880-01	.9220	.4524-02	.3075-02	.5620	3.952	567.2
208	.00000	.93200	1257.0	.9120-01	.1146	.1339	.9220	.6825-02	.4646-02	.8480	5.956	565.2
208	4.3800	.96500	1220.0	.2284	.3018	.3535	.9273	.1801-01	.1164-01	1.790	13.19	594.0
208	4.3800	.97500	1221.0	.2058	.2742	.3231	.9273	.1646-01	.1049-01	1.572	11.51	598.0

IH72, OTS CLEAN, LEFT SRB HI/HREF (RVZL37)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
208	4.3800	.98500	1222.0	.1776	.2357	.2769	.9273	.1411-01	.9049-02	1.372	9.962	596.2
208	4.3800	.99500	1223.0	.1466	.1936	.2266	.9273	.1155-01	.7470-02	1.150	8.334	593.8
208	5.0000	.50000-01	1209.0	.5770-01	.6970-01	.7720-01	.9267	.3936-02	.2940-02	.6370	4.793	531.2
208	5.0000	.90000-01	1210.0	.1574	.2022	.2333	.9267	.1189-01	.8018-02	1.351	9.854	579.4
208	5.0000	10.000	1211.0	.1787	.2296	.2648	.9267	.1349-01	.9106-02	1.536	11.21	579.2
208	20.000	.96500	1224.0	.2420	.3184	.3759	.9258	.1916-01	.1233-01	1.921	13.92	592.1
208	20.000	.97500	1225.0	.2384	.3149	.3728	.9258	.1900-01	.1215-01	1.870	13.54	593.9
208	20.000	.98500	1226.0	.2006	.2621	.3079	.9258	.1569-01	.1022-01	1.627	11.89	588.6
208	35.000	10.000	1208.0	.1494	.1904	.2215	.9245	.1128-01	.7612-02	1.321	9.661	574.3
208	40.000	.96500	1228.0	.1334	.1699	.1973	.9247	.1005-01	.6796-02	1.182	8.702	574.0
208	40.000	.97500	1229.0	.1586	.2029	.2362	.9247	.1204-01	.8083-02	1.386	10.20	576.3
208	40.000	.99500	1231.0	.1417	.1807	.2100	.9247	.1070-01	.7218-02	1.249	9.132	574.8
207	45.000	.11500	1020.0	.9170-01	.1157	.1355	.9220	.6903-02	.4674-02	.8470	6.209	568.7
207	45.000	.14300	1021.0	.7250-01	.9030-01	.1047	.9220	.5336-02	.3696-02	.7030	5.182	559.5
207	45.000	.17100	1022.0	.5800-01	.7180-01	.8290-01	.9220	.4224-02	.2957-02	.5760	4.256	554.9
207	45.000	.20000	1023.0	.3670-01	.4480-01	.5120-01	.9220	.2609-02	.1868-02	.3850	2.860	543.7
207	45.000	.30000	1024.0	.2310-01	.2820-01	.3220-01	.9220	.1640-02	.1178-02	.2450	1.818	542.2
207	45.000	.40000	1025.0	.5720-01	.7060-01	.8140-01	.9220	.4146-02	.2913-02	.5730	4.099	553.1
207	45.000	.55000	1027.0	.6740-01	.8330-01	.9600-01	.9220	.4890-02	.3434-02	.6740	4.951	553.4
207	45.000	.65000	1029.0	.6760-01	.8410-01	.9740-01	.9220	.4962-02	.3445-02	.6590	4.828	558.5
207	45.000	.70000	1030.0	.6160-01	.7730-01	.9020-01	.9220	.4596-02	.3140-02	.5800	4.333	565.2
207	45.000	.80000	1031.0	.7690-01	.9740-01	.1144	.9220	.5832-02	.3919-02	.6990	5.205	571.5
207	45.000	.87500	1032.0	.3030-01	.3770-01	.4370-01	.9220	.2225-02	.1543-02	.2940	2.086	559.1
207	45.000	.92500	1033.0	.3480-01	.4330-01	.5020-01	.9220	.2556-02	.1775-02	.3400	2.402	558.3
208	45.000	.93200	1258.0	.3850-01	.4760-01	.5480-01	.9220	.2792-02	.1963-02	.3860	2.825	551.4
209	45.000	.93900	1264.0	.4370-01	.5390-01	.6190-01	.9220	.3152-02	.2227-02	.4420	3.232	549.2
207	50.000	.95300	1034.0	.8910-01	.1132	.1314	.9244	.6698-02	.4540-02	.7990	5.636	573.9
207	50.000	.96700	1035.0	.9360-01	.1192	.1386	.9244	.7065-02	.4768-02	.8310	5.899	575.5
207	50.000	.98000	1036.0	.1145	.1458	.1695	.9244	.8640-02	.5834-02	1.018	7.133	575.3
208	65.000	.43000-01	1200.0	.2477	.3303	.3998	.9240	.2037-01	.1262-01	1.886	13.63	598.4
208	65.000	.50000-01	1201.0	.1996	.2595	.3075	.9240	.1567-01	.1017-01	1.648	11.98	585.8
208	65.000	.57000-01	1202.0	.1887	.2442	.2884	.9240	.1470-01	.9616-02	1.582	11.52	583.4
208	65.000	.63000-01	1203.0	.1488	.1913	.2247	.9240	.1145-01	.7580-02	1.276	9.306	579.6
208	65.000	.90000-01	1204.0	.1230	.1577	.1849	.9240	.9424-02	.6267-02	1.064	7.767	578.1
208	65.000	.10000+00	1205.0	.1572	.2015	.2361	.9240	.1203-01	.8010-02	1.363	9.951	577.7
209	76.000	.12700	1291.0	.1195	.1493	.1736	.9220	.8837-02	.6084-02	1.139	8.249	560.6
209	76.000	.13400	1292.0	.1294	.1636	.1920	.9220	.9777-02	.6589-02	1.179	8.447	569.0
209	76.000	.17300	1293.0	.6610-01	.8080-01	.9230-01	.9220	.4700-02	.3364-02	.6900	5.097	542.6
209	76.000	.18000	1294.0	.6960-01	.8510-01	.9720-01	.9220	.4948-02	.3545-02	.7290	5.331	542.2
209	76.000	.18600	1295.0	.6740-01	.8240-01	.9410-01	.9220	.4791-02	.3434-02	.7070	5.223	541.9
209	76.000	.19300	1296.0	.6060-01	.7390-01	.8430-01	.9220	.4291-02	.3086-02	.6410	4.757	540.0
209	76.000	.20000	1297.0	.5230-01	.6360-01	.7230-01	.9220	.3681-02	.2661-02	.5600	4.148	537.3
207	90.000	.20000-02	1039.0	.4533	.6720	.6289	.9571	.3205-01	.2310-01	2.660	18.58	634.7

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
207	90.000	.10000+00	1042.0	.2490	.3298	.3948	.9246	.2012-01	.1269-01	1.943	14.05	596.7
207	90.000	.13400	1045.0	.2005	.2771	.3525	.9220	.1796-01	.1022-01	1.385	9.934	614.2
207	90.000	.17300	1046.0	.1161	.1481	.1752	.9220	.8929-02	.5915-02	1.025	7.487	576.6
207	90.000	.18000	1047.0	.1156	.1447	.1684	.9220	.8581-02	.5891-02	1.099	8.082	563.3
207	90.000	.18600	1048.0	.1064	.1349	.1587	.9220	.8086-02	.5423-02	.9630	7.052	572.2
207	90.000	.19300	1049.0	.9000-01	.1134	.1327	.9220	.6765-02	.4584-02	.8320	6.100	568.4
207	90.000	.20000	1050.0	.7470-01	.9350-01	.1088	.9220	.5546-02	.3807-02	.7100	5.224	563.3
207	90.000	.25000	1051.0	.5410-01	.6700-01	.7730-01	.9220	.3939-02	.2756-02	.5370	3.964	555.1
207	90.000	.30000	1052.0	.4770-01	.5880-01	.6760-01	.9220	.3445-02	.2431-02	.4830	3.574	551.1
207	90.000	.50000	1054.0	.6520-01	.8090-01	.9350-01	.9220	.4763-02	.3324-02	.6440	4.672	556.2
207	90.000	.60000	1055.0	.9780-01	.1231	.1439	.9220	.7335-02	.4983-02	.9090	6.624	567.5
207	90.000	.75000	1057.0	.7510-01	.9570-01	.1131	.9220	.5763-02	.3826-02	.6660	5.124	575.8
207	90.000	.80000	1058.0	.3130-01	.3840-01	.4390-01	.9220	.2239-02	.1594-02	.3230	2.399	546.8
207	90.000	.95300	1061.0	.4310-01	.5520-01	.6430-01	.9250	.3274-02	.2194-02	.3740	2.639	579.4
207	90.000	.98000	1063.0	.5760-01	.7360-01	.8550-01	.9250	.4357-02	.2935-02	.5060	3.550	577.5
207	90.000	.99400	1064.0	.5490-01	.7060-01	.8230-01	.9250	.4194-02	.2797-02	.4720	3.320	581.0
207	135.00	.14300	1066.0	.1379	.1777	.2120	.9220	.1080-01	.7027-02	1.176	8.563	582.5
207	135.00	.17100	1067.0	.1319	.1705	.2039	.9220	.1039-01	.6721-02	1.113	8.100	584.2
207	135.00	.20000	1068.0	.1188	.1516	.1794	.9220	.9142-02	.6053-02	1.048	7.652	576.8
207	135.00	.30000	1069.0	.8130-01	.1013	.1175	.9220	.5988-02	.4145-02	.7880	5.804	559.8
207	135.00	.50000	1070.0	.7950-01	.9920-01	.1151	.9220	.5867-02	.4049-02	.7640	5.535	561.1
207	135.00	.60000	1071.0	.8220-01	.1035	.1210	.9220	.6168-02	.4191-02	.7640	5.610	567.4
207	135.00	.70000	1072.0	.6240-01	.7920-01	.9320-01	.9220	.4752-02	.3181-02	.5630	4.191	572.8
208	135.00	.72400	1237.0	.6980-01	.8800-01	.1030	.9220	.5249-02	.3554-02	.6420	4.894	567.1
208	135.00	.74000	1243.0	.7090-01	.8940-01	.1048	.9220	.5343-02	.3611-02	.6500	4.985	567.9
208	135.00	.75000	1246.0	.6920-01	.8750-01	.1027	.9220	.5233-02	.3528-02	.6320	4.828	568.7
208	135.00	.77100	1252.0	.7030-01	.8900-01	.1046	.9220	.5330-02	.3580-02	.6360	4.806	570.1
207	135.00	.80000	1073.0	.6150-01	.7800-01	.9190-01	.9220	.4682-02	.3131-02	.5530	4.117	573.2
208	135.00	.93200	1259.0	.2380-01	.2930-01	.3360-01	.9220	.1714-02	.1212-02	.2410	1.768	548.9
209	135.00	.93900	1265.0	.2570-01	.3160-01	.3630-01	.9220	.1846-02	.1310-02	.2630	1.925	547.0
207	135.00	.95300	1074.0	.5850-01	.7440-01	.8380-01	.9295	.4268-02	.2978-02	.5210	3.673	575.0
209	138.00	.96700	1268.0	.6410-01	.8150-01	.9140-01	.9300	.4656-02	.3266-02	.5720	4.002	572.6
209	138.00	.99400	1272.0	.5610-01	.7160-01	.8040-01	.9300	.4096-02	.2855-02	.4930	3.445	575.1
209	162.00	.95300	1267.0	.9470-01	.1236	.1365	.9345	.6952-02	.4820-02	.7700	5.518	588.1
209	162.00	.96700	1269.0	.1068	.1407	.1560	.9345	.7944-02	.5437-02	.8440	6.057	592.6
209	162.00	.98000	1271.0	.1220	.1619	.1802	.9345	.9175-02	.6211-02	.9420	6.723	596.2
207	180.00	.20000	1078.0	.1021	.1280	.1485	.9228	.7568-02	.5202-02	.9630	7.078	564.7
207	180.00	.40000	1079.0	.8980-01	.1122	.1300	.9228	.6623-02	.4574-02	.8560	6.071	562.8
207	180.00	.60000	1080.0	.7350-01	.9140-01	.1054	.9228	.5371-02	.3744-02	.7150	5.273	558.7
207	180.00	.70000	1081.0	.7270-01	.9150-01	.1065	.9228	.5429-02	.3704-02	.6750	5.087	567.7
208	180.00	.74000	1238.0	.8230-01	.1037	.1207	.9228	.6151-02	.4195-02	.7620	5.769	566.2
207	180.00	.75000	1082.0	.7460-01	.9450-01	.1106	.9228	.5636-02	.3803-02	.6770	5.310	571.9
208	180.00	.77100	1247.0	.8000-01	.1011	.1179	.9228	.6010-02	.4077-02	.7320	5.711	568.3

IH72, OTS CLEAN, LEFT SRB HI/HREF (RVZL37)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
207	180.00	.80000	1083.0	.7740-01	.9870-01	.1161	.9228	.5917-02	.3946-02	.6860	5.097	576.0
208	180.00	.93900	1260.0	.7520-01	.9530-01	.1115	.9228	.5680-02	.3833-02	.6800	4.857	570.3
207	180.00	.96700	1085.0	.1261	.1736	.1905	.9382	.9708-02	.6425-02	.8800	6.091	612.9
207	180.00	.98000	1086.0	.1409	.1956	.2153	.9382	.1097-01	.7182-02	.9630	6.680	615.7
207	180.00	.99400	1087.0	.1417	.1975	.2176	.9382	.1109-01	.7221-02	.9580	6.600	617.1
209	198.00	.95300	1276.0	.1126	.1573	.1683	.9418	.8568-02	.5733-02	.7540	5.439	616.3
209	198.00	.96700	1280.0	.1420	.2022	.2173	.9418	.1107-01	.7232-02	.9090	6.449	622.2
207	225.00	.11500	1088.0	.1675	.2190	.2586	.9251	.1318-01	.8537-02	1.361	9.875	590.4
207	225.00	.17700	1090.0	.1023	.1284	.1472	.9251	.7499-02	.5213-02	.9600	7.055	565.6
207	225.00	.60000	1091.0	.8180-01	.1033	.1189	.9251	.6060-02	.4167-02	.7490	5.492	570.0
207	225.00	.70000	1092.0	.6620-01	.8460-01	.9820-01	.9251	.5004-02	.3371-02	.5800	4.279	577.7
208	225.00	.72400	1233.0	.7520-01	.9610-01	.1115	.9251	.5683-02	.3833-02	.6590	5.001	575.8
208	225.00	.74000	1239.0	.7300-01	.9330-01	.1083	.9251	.5516-02	.3721-02	.6400	4.874	575.8
208	225.00	.75000	1244.0	.7760-01	.9940-01	.1157	.9251	.5894-02	.3954-02	.6730	5.151	577.7
208	225.00	.77100	1248.0	.7940-01	.1020	.1189	.9251	.6058-02	.4044-02	.6810	5.197	579.3
207	225.00	.80000	1093.0	.8220-01	.1064	.1247	.9251	.6357-02	.4187-02	.6890	5.013	585.3
208	225.00	.93200	1254.0	.7570-01	.9840-01	.1156	.9251	.5890-02	.3860-02	.6270	4.429	585.4
208	225.00	.93900	1261.0	.9380-01	.1227	.1450	.9251	.7388-02	.4778-02	.7580	5.305	589.3
209	238.00	.95300	1277.0	.7750-01	.1129	.1171	.9460	.5965-02	.3944-02	.4700	3.337	628.6
209	238.00	.96700	1281.0	.9600-01	.1421	.1478	.9460	.7526-02	.4887-02	.5630	4.054	632.7
209	238.00	.98000	1285.0	.1205	.1789	.1861	.9460	.9474-02	.6133-02	.7020	5.056	633.4
207	256.00	.11500	1094.0	.1491	.1929	.2259	.9251	.1151-01	.7599-02	1.255	9.129	584.7
207	256.00	.12800	1095.0	.7230-01	.8910-01	.1008	.9251	.5134-02	.3686-02	.7340	5.431	550.8
207	256.00	.14600	1096.0	.5400-01	.6680-01	.7570-01	.9251	.3855-02	.2752-02	.5400	3.991	553.6
208	256.00	.20000	1097.0	.1179	.1443	.1623	.9252	.8272-02	.6007-02	1.228	9.118	543.5
208	256.00	.40000	1098.0	.8810-01	.1102	.1259	.9252	.6413-02	.4489-02	.8380	5.873	561.3
208	256.00	.60000	1099.0	.7830-01	.9810-01	.1122	.9252	.5720-02	.3987-02	.7370	5.384	563.0
208	256.00	.80000	1100.0	.7740-01	.9970-01	.1164	.9252	.5930-02	.3943-02	.6590	4.803	580.8
208	256.00	.87500	1101.0	.8280-01	.1079	.1271	.9252	.6475-02	.4218-02	.6770	4.687	587.3
208	270.00	.50000-01	1102.0	.2668	.3522	.3684	.9431	.1877-01	.1359-01	2.096	15.19	593.6
208	270.00	.10000+00	1103.0	.2413	.3154	.3293	.9431	.1678-01	.1229-01	1.957	14.21	588.7
208	270.00	.11500	1104.0	.1358	.1736	.2022	.9246	.1030-01	.6919-02	1.188	8.680	576.1
208	270.00	.14600	1105.0	.6030-01	.7400-01	.8370-01	.9246	.4263-02	.3072-02	.6200	4.600	546.0
208	270.00	.72400	1234.0	.6330-01	.7960-01	.9160-01	.9246	.4667-02	.3226-02	.5890	4.341	565.3
208	270.00	.74000	1240.0	.6510-01	.8240-01	.9530-01	.9246	.4854-02	.3318-02	.5910	4.363	569.7
208	270.00	.93200	1255.0	.7890-01	.1019	.1197	.9246	.6101-02	.4019-02	.6640	4.725	582.6
208	270.00	.95300	1110.0	.3790-01	.5340-01	.5610-01	.9441	.2860-02	.1930-02	.2480	1.708	619.2
208	270.00	.96700	1111.0	.8800-01	.1261	.1329	.9441	.6774-02	.4484-02	.5550	3.831	624.1
208	270.00	.98000	1112.0	.1038	.1494	.1577	.9441	.8034-02	.5287-02	.6470	4.434	625.5
208	270.00	.99400	1113.0	.1496	.2154	.2272	.9441	.1158-01	.7621-02	.9320	6.435	625.5
208	284.00	.11500	1114.0	.1406	.1797	.2103	.9238	.1072-01	.7166-02	1.231	9.000	576.0
208	284.00	.14600	1116.0	.5860-01	.7160-01	.8110-01	.9238	.4133-02	.2985-02	.6120	4.550	542.7
208	284.00	.20000	1117.0	.8730-01	.1079	.1231	.9238	.6275-02	.4448-02	.8700	6.434	552.2

IH72, OTS CLEAN, LEFT SRB HI/HREF

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
208	284.00	.40000	1118.0	.8030-01	.9970-01	.1142	.9238	.5820-02	.4092-02	.7850	5.534	556.0
208	284.00	.87500	1121.0	.4960-01	.6320-01	.7370-01	.9238	.3757-02	.2527-02	.4400	3.093	573.8
209	302.00	.98000	1282.0	.1133	.1557	.1705	.9384	.8684-02	.5771-02	.7930	5.717	610.4
208	315.00	.92500	1122.0	.1360	.1723	.2022	.9223	.1030-01	.6928-02	1.229	9.010	570.4
208	315.00	.95300	1125.0	.7010-01	.8620-01	.9870-01	.9223	.5031-02	.3570-02	.7150	5.296	547.7
208	315.00	.98000	1127.0	.5700-01	.6980-01	.7990-01	.9223	.4069-02	.2903-02	.5890	4.297	545.1
208	315.00	.99400	1128.0	.5790-01	.7090-01	.8090-01	.9223	.4124-02	.2949-02	.6020	4.441	543.7
208	315.00	.70000	1129.0	.5290-01	.6520-01	.7480-01	.9223	.3812-02	.2698-02	.5370	4.003	548.9
208	315.00	.72400	1235.0	.5520-01	.6790-01	.7770-01	.9223	.3962-02	.2814-02	.5650	4.273	547.1
208	315.00	.74000	1241.0	.5410-01	.6650-01	.7630-01	.9223	.3887-02	.2756-02	.5500	4.203	548.2
208	315.00	.75000	1245.0	.5440-01	.6720-01	.7720-01	.9223	.3934-02	.2774-02	.5470	4.203	550.7
208	315.00	.77100	1250.0	.5620-01	.6970-01	.8030-01	.9223	.4091-02	.2865-02	.5560	4.383	553.9
208	315.00	.80000	1130.0	.6450-01	.8020-01	.9270-01	.9223	.4723-02	.3285-02	.6270	4.706	556.9
208	315.00	.87500	1131.0	.4890-01	.6140-01	.7150-01	.9223	.3645-02	.2493-02	.4580	3.229	564.0
208	315.00	1265.0	1132.0	.7170-01	.9040-01	.1057	.9223	.5386-02	.3656-02	.6620	4.670	566.9
208	315.00	1074.0	1256.0	.8710-01	.1100	.1289	.9223	.6567-02	.4437-02	.7950	5.610	568.6
208	315.00	1076.0	1133.0	.8730-01	.1161	.1282	.9356	.6534-02	.4449-02	.6710	4.650	597.0
208	315.00	1077.0	1134.0	.1165	.1592	.1779	.9356	.9063-02	.5935-02	.8280	5.779	608.4
208	315.00	1057.0	1135.0	.1084	.1510	.1702	.9356	.8673-02	.5522-02	.7310	5.041	615.4
208	315.00	1058.0	1136.0	.8110-01	.1146	.1301	.9356	.6628-02	.4130-02	.5270	3.592	620.1
208	330.00	.72400	1236.0	.4010-01	.4950-01	.5690-01	.9220	.2901-02	.2042-02	.4020	3.113	550.8
208	335.00	.43000-01	1212.0	.2488	.3252	.3681	.9310	.1876-01	.1268-01	2.019	14.66	588.6
208	335.00	.50000-01	1213.0	.2191	.2842	.3204	.9310	.1633-01	.1116-01	1.821	13.25	584.7
208	335.00	.57000-01	1214.0	.2097	.2706	.3042	.9310	.1550-01	.1069-01	1.775	12.93	581.7
208	335.00	.63000-01	1215.0	.1878	.2418	.2715	.9310	.1383-01	.9572-02	1.603	11.69	580.3
208	335.00	.90000-01	1216.0	.1872	.2407	.2700	.9310	.1376-01	.9537-02	1.603	11.70	579.7
209	342.00	.95300	1275.0	.1323	.1742	.1988	.9304	.1012-01	.6735-02	1.046	7.133	592.5
209	342.00	.96700	1279.0	.1422	.1916	.2218	.9304	.1130-01	.7240-02	1.049	7.275	602.9
209	342.00	.98000	1283.0	.1523	.2072	.2411	.9304	.1228-01	.7757-02	1.096	7.442	606.6
209	342.00	.99400	1287.0	.1229	.1668	.1938	.9304	.9868-02	.6260-02	.8910	6.051	605.6
207	355.00	.95300	1016.0	.2009	.2673	.3116	.9285	.1588-01	.1024-01	1.547	10.78	598.8
207	355.00	.96700	1017.0	.1885	.2552	.3011	.9285	.1534-01	.9608-02	1.379	9.638	606.3
207	355.00	.98000	1018.0	.1683	.2265	.2661	.9285	.1356-01	.8578-02	1.253	8.709	603.8
207	355.00	.99400	1019.0	.1313	.1761	.2065	.9285	.1052-01	.6692-02	.9860	6.796	602.5

IH72, LEFT SRB CLEAN, HU/HREF (RVZL70)

LEFT SRB

PARAMETRIC DATA

ALPHA = -5.000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
197	-5.020	-9.000	4.020	73.00	735.0	173.7	.4680	5.295	2596.	.2261-03	.1398-06	4.197
198	-5.050	-9.000	4.020	72.90	735.0	173.6	.4670	5.286	2595.	.2258-03	.1398-06	4.193
199	-5.000	-9.000	4.020	72.90	735.0	173.6	.4670	5.288	2595.	.2259-03	.1398-06	4.196

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
197	.5111-01	.1125-01
198	.5107-01	.1125-01
199	.5108-01	.1125-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
197	.00000	.11500	1000.0	.1649	.2099	.2464	.9228	.1259-01	.8428-02	1.445	10.63	563.6
197	.00000	.20000	1001.0	.7160-01	.8910-01	.1028	.9228	.5254-02	.3658-02	.6830	5.063	548.3
197	.00000	.25000	1003.0	.6070-01	.7550-01	.8700-01	.9228	.4447-02	.3102-02	.5820	4.314	547.5
197	.00000	.30000	1004.0	.6780-01	.8430-01	.9710-01	.9228	.4965-02	.3465-02	.6500	4.821	547.4
197	.00000	.50000	1006.0	.5700-01	.7100-01	.8200-01	.9228	.4189-02	.2915-02	.5430	3.973	548.7
197	.00000	.55000	1007.0	.5370-01	.6700-01	.7730-01	.9228	.3952-02	.2745-02	.5100	3.729	549.2
197	.00000	.60000	1008.0	.5470-01	.6810-01	.7860-01	.9228	.4016-02	.2797-02	.5220	3.871	548.3
197	.00000	.65000	1009.0	.5340-01	.6670-01	.7720-01	.9228	.3946-02	.2729-02	.5020	3.690	551.1
197	.00000	.70000	1010.0	.4830-01	.6040-01	.6990-01	.9228	.3574-02	.2471-02	.4540	3.478	551.2
198	.00000	.72400	1232.0	.3100-01	.3840-01	.4420-01	.9228	.2256-02	.1584-02	.3020	2.311	544.2
198	.00000	.74000	1242.0	.5350-01	.6630-01	.7620-01	.9228	.3889-02	.2730-02	.5200	4.060	544.5
197	.00000	.75000	1011.0	.5150-01	.6460-01	.7490-01	.9228	.3829-02	.2635-02	.4790	3.797	553.1
198	.00000	.77100	1251.0	.5260-01	.6540-01	.7530-01	.9228	.3844-02	.2687-02	.5060	3.995	546.3
197	.00000	.80000	1012.0	.5330-01	.6670-01	.7740-01	.9228	.3956-02	.2722-02	.4950	3.784	553.3
197	.00000	.87500	1013.0	.4660-01	.5800-01	.6690-01	.9228	.3420-02	.2384-02	.4470	3.174	547.7
198	.00000	.93200	1257.0	.5420-01	.6670-01	.7630-01	.9228	.3899-02	.2766-02	.5400	3.840	539.6
198	4.3800	.96500	1220.0	.1167	.1508	.1628	.9374	.8311-02	.5961-02	.9690	7.216	572.2
198	4.3800	.97500	1221.0	.1423	.1861	.2017	.9374	.1030-01	.7268-02	1.135	8.392	578.7

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, LEFT SRB CLEAN,

HU/HREF

(RVZL70)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
198	4.3800	.98500	1222.0	.1483	.1952	.2121	.9374	.1083-01	.7574-02	1.158	8.467	581.9
198	4.3800	.99500	1223.0	.1563	.2074	.2260	.9374	.1154-01	.7984-02	1.191	8.660	585.6
198	5.0000	.50000-01	1209.0	.5130-01	.6220-01	.6600-01	.9365	.3371-02	.2620-02	.5480	4.138	525.4
198	5 0000	.90000-01	1210.0	.2042	.2638	.2864	.9365	.1463-01	.1043-01	1.697	12.42	572.1
198	5 0000	10.000	1211.0	.2336	.3017	.3274	.9365	.1672-01	.1193-01	1.944	14.24	571.8
198	20.000	.96500	1224.0	.8810-01	.1144	.1264	.9342	.6452-02	.4501-02	.7200	5.265	574.8
198	20.000	.97500	1225.0	.1068	.1401	.1555	.9342	.7939-02	.5455-02	.8440	6.152	580.1
198	20.000	.98500	1226.0	.1140	.1499	.1666	.9342	.8505-02	.5824-02	.8940	6.557	581.3
198	35.000	10.000	1208.0	.1811	.2311	.2588	.9306	.1322-01	.9246-02	1.569	11.53	565.0
198	40.000	.96500	1228.0	.5940-01	.7690-01	.8700-01	.9304	.4441-02	.3033-02	.4890	3.605	573.4
198	40.000	.97500	1229.0	.6600-01	.8630-01	.9810-01	.9304	.5010-02	.3372-02	.5280	3.879	578.2
198	40.000	.99500	1231.0	.7950-01	.1051	.1203	.9304	.6145-02	.4059-02	.6120	4.455	584.0
197	45.000	.11500	1020.0	.8650-01	.1095	.1286	.9220	.6574-02	.4420-02	.7730	5.697	560.1
197	45.000	.14300	1021.0	.2150-01	.2640-01	.3030-01	.9220	.1549-02	.1098-02	.2160	1.612	538.0
197	45.000	.17100	1022.0	.1870-01	.2290-01	.2630-01	.9220	.1342-02	.9540-03	.1890	1.410	536.8
197	45.000	.20000	1023.0	.2510-01	.3090-01	.3550-01	.9220	.1814-02	.1283-02	.2520	1.875	538.9
197	45.000	.40000	1025.0	.2200-01	.2720-01	.3140-01	.9220	.1604-02	.1123-02	.2150	1.546	543.6
197	45.000	.50000	1026.0	.2260-01	.2800-01	.3240-01	.9220	.1657-02	.1155-02	.2180	1.604	546.0
197	45.000	.55000	1027.0	.2290-01	.2840-01	.3290-01	.9220	.1681-02	.1171-02	.2220	1.634	545.8
197	45.000	.65000	1029.0	.2700-01	.3370-01	.3910-01	.9220	.2000-02	.1379-02	.2550	1.873	550.4
197	45.000	.70000	1030.0	.2450-01	.3050-01	.3550-01	.9220	.1814-02	.1250-02	.2300	1.734	550.8
197	45.000	.80000	1031.0	.2790-01	.3490-01	.4060-01	.9220	.2074-02	.1424-02	.2600	1.959	552.2
197	45.000	.87500	1032.0	.2610-01	.3250-01	.3760-01	.9220	.1924-02	.1333-02	.2490	1.774	548.4
197	45.000	.92500	1033.0	.2950-01	.3680-01	.4270-01	.9220	.2181-02	.1506-02	.2790	1.981	549.8
198	45.000	.93200	1258.0	.3760-01	.4630-01	.5320-01	.9220	.2719-02	.1918-02	.3730	2.747	540.3
199	45.000	.93900	1264.0	.4180-01	.5200-01	.6030-01	.9220	.3080-02	.2133-02	.3970	2.905	548.4
197	50.000	.95300	1034.0	.6100-01	.7980-01	.9180-01	.9288	.4692-02	.3119-02	.4870	3.431	578.9
197	50.000	.96700	1035.0	.6660-01	.8810-01	.1020	.9288	.5216-02	.3404-02	.5130	3.626	584.3
197	50.000	.98000	1036.0	.6580-01	.8740-01	.1015	.9288	.5190-02	.3361-02	.4990	3.480	586.5
198	65.000	.43000-01	1200.0	.1062	.1350	.1548	.9264	.7905-02	.5424-02	.9350	6.876	562.5
198	65.000	.50000-01	1201.0	.9810-01	.1237	.1412	.9264	.7209-02	.5008-02	.8870	6.542	557.6
198	65.000	.57000-01	1202.0	.9870-01	.1247	.1425	.9264	.7276-02	.5041-02	.8880	6.544	558.7
198	65.000	.63000-01	1203.0	.7950-01	.1005	.1148	.9264	.5860-02	.4060-02	.7150	5.267	558.7
198	65.000	.90000-01	1204.0	.9070-01	.1157	.1330	.9264	.6793-02	.4631-02	.7870	5.783	564.8
198	65.000	.10000+00	1205.0	.1160	.1475	.1693	.9264	.8646-02	.5922-02	1.016	7.475	563.1
199	76.000	.12000	1290.0	.4970-01	.6160-01	.7120-01	.9220	.3636-02	.2537-02	.4810	3.475	545.2
199	76.000	.12700	1291.0	.2980-01	.3670-01	.4210-01	.9220	.2150-02	.1523-02	.2990	2.191	538.3
199	76.000	.13400	1292.0	.2080-01	.2550-01	.2920-01	.9220	.1494-02	.1061-02	.2100	1.528	536.9
199	76.000	.17300	1293.0	.8200-02	.1000-01	.1150-01	.9220	.5852-03	.4176-03	.8400-01	.6190	534.7
199	76.000	.18000	1294.0	.7900-02	.9700-02	.1110-01	.9220	.5678-03	.4052-03	.8100-01	.5950	534.6
199	76.000	.18600	1295.0	.8000-02	.9800-02	.1120-01	.9220	.5733-03	.4088-03	.8200-01	.6050	535.0
199	76.000	.19300	1296.0	.7500-02	.9200-02	.1060-01	.9220	.5401-03	.3849-03	.7700-01	.5710	535.3
199	76.000	.20000	1297.0	.7900-02	.9700-02	.1110-01	.9220	.5656-03	.4027-03	.8000-01	.5940	535.7

IH72, LEFT SRB CLEAN, HU/HREF (RVZL70)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
197	90.000	.00000	1038.0	.8000-02	.9800-02	.8400-02	.9870	.4286-03	.4078-03	.8000-01	.5910	538.6
197	90.000	.20000-02	1039.0	.2613	.3466	.3315	.9570	.1694-01	.1335-01	1.994	14.26	585.8
197	90.000	.10000+00	1042.0	.3830-01	.4770-01	.5450-01	.9246	.2787-02	.1956-02	.3640	2.697	549.0
197	90.000	.13400	1045.0	.2140-01	.2640-01	.3030-01	.9220	.1547-02	.1096-02	.2160	1.608	538.1
197	90.000	.17300	1046.0	.7100-02	.8800-02	.1000-01	.9220	.5124-03	.3645-03	.7200-01	.5400	536.4
197	90.000	.18000	1047.0	.1700-01	.2080-01	.2380-01	.9220	.1217-02	.8705-03	.1750	1.310	533.5
197	90.000	.18600	1048.0	.5100-02	.6300-02	.7200-02	.9220	.3686-03	.2617-03	.5200-01	.3850	537.4
197	90.000	.19300	1049.0	.4700-02	.5800-02	.6600-02	.9220	.3385-03	.2399-03	.4700-01	.3510	538.4
197	90.000	.20000	1050.0	.3700-02	.4500-02	.5200-02	.9220	.2638-03	.1872-03	.3700-01	.2750	537.6
197	90.000	.25000	1051.0	.9400-02	.1160-01	.1340-01	.9220	.6831-03	.4820-03	.9400-01	.6980	540.4
197	90.000	.30000	1052.0	.2340-01	.2900-01	.3350-01	.9220	.1711-02	.1197-02	.2280	1.695	544.3
197	90.000	.50000	1054.0	.1300-01	.1620-01	.1870-01	.9220	.9582-03	.6640-03	.1240	.9040	548.4
197	90.000	.60000	1055.0	.2320-01	.2910-01	.3390-01	.9220	.1730-02	.1185-02	.2160	1.583	553.2
197	90.000	.75000	1057.0	.4100-01	.5170-01	.6050-01	.9220	.3091-02	.2095-02	.3730	2.896	557.1
197	90.000	.80000	1058.0	.4540-01	.5720-01	.6700-01	.9220	.3422-02	.2320-02	.4130	3.047	557.1
197	90.000	.95300	1061.0	.8310-01	.1119	.1353	.9249	.6918-02	.4250-02	.6080	4.266	592.0
197	90.000	.98000	1063.0	.9600-01	.1296	.1571	.9249	.8032-02	.4905-02	.6950	4.842	593.4
197	90.000	.99400	1064.0	.8760-01	.1184	.1437	.9249	.7346-02	.4476-02	.6320	4.418	593.9
197	135.00	.14300	1066.0	.6050-01	.7640-01	.8960-01	.9220	.4582-02	.3090-02	.5440	4.013	558.9
197	135.00	.20000	1068.0	.1720-01	.2110-01	.2430-01	.9220	.1243-02	.8769-03	.1710	1.271	540.3
197	135.00	.30000	1069.0	.3320-01	.4110-01	.4740-01	.9220	.2421-02	.1699-02	.3270	2.430	542.7
197	135.00	.50000	1070.0	.3600-01	.4500-01	.5250-01	.9220	.2681-02	.1839-02	.3350	2.440	552.6
197	135.00	.60000	1071.0	.4400-01	.5510-01	.6420-01	.9220	.3282-02	.2247-02	.4090	3.021	553.2
197	135.00	.70000	1072.0	.4060-01	.5130-01	.6010-01	.9220	.3070-02	.2077-02	.3680	2.761	557.8
198	135.00	.72400	1237.0	.4700-01	.5890-01	.6850-01	.9220	.3498-02	.2401-02	.4390	3.369	552.0
198	135.00	.74000	1243.0	.4750-01	.5950-01	.6930-01	.9220	.3537-02	.2425-02	.4420	3.416	552.5
198	135.00	.75000	1246.0	.4820-01	.6040-01	.7030-01	.9220	.3592-02	.2459-02	.4470	3.443	553.0
198	135.00	.77100	1252.0	.4940-01	.6190-01	.7220-01	.9220	.3688-02	.2522-02	.4570	3.483	553.5
197	135.00	.80000	1073.0	.5430-01	.6880-01	.8080-01	.9220	.4130-02	.2775-02	.4850	3.634	560.3
198	135.00	.93200	1259.0	.5240-01	.6510-01	.7530-01	.9220	.3846-02	.2675-02	.5040	3.700	546.4
199	135.00	.93900	1265.0	.6180-01	.7750-01	.9040-01	.9220	.4619-02	.3155-02	.5710	4.162	553.8
197	135.00	.95300	1074.0	.1094	.1488	.1822	.9245	.9311-02	.5594-02	.7780	5.430	596.0
199	138.00	.95300	1266.0	.1067	.1440	.1751	.9246	.8945-02	.5450-02	.7730	5.369	592.9
199	138.00	.96700	1268.0	.1130	.1529	.1862	.9246	.9509-02	.5774-02	.8140	5.636	593.7
199	138.00	.98000	1270.0	.1012	.1371	.1672	.9246	.8539-02	.5168-02	.7250	4.988	594.3
199	138.00	.99400	1272.0	.7100-01	.9570-01	.1163	.9246	.5942-02	.3625-02	.5150	3.567	592.6
199	162.00	.95300	1267.0	.6360-01	.8430-01	.1000+00	.9259	.5107-02	.3249-02	.4860	3.492	585.0
199	162.00	.96700	1269.0	.7460-01	.9940-01	.1184	.9259	.6048-02	.3809-02	.5600	4.029	587.7
199	162.00	.98000	1271.0	.7280-01	.9720-01	.1159	.9259	.5920-02	.3718-02	.5440	3.900	588.3
197	180.00	.20000	1078.0	.1210-01	.1490-01	.1710-01	.9220	.8719-03	.6184-03	.1220	.9080	537.9
197	180.00	.40000	1079.0	.1900-01	.2350-01	.2700-01	.9220	.1382-02	.9701-03	.1870	1.338	542.6
197	180.00	.60000	1080.0	.3240-01	.4040-01	.4690-01	.9220	.2398-02	.1659-02	.3080	2.284	549.1
197	180.00	.70000	1081.0	.2800-01	.3500-01	.4070-01	.9220	.2078-02	.1429-02	.2620	1.993	551.6

IH72, LEFT SRB CLEAN,

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
198	180.00	.74000	1238.0	.3150-01	.3910-01	.4520-01	.9220	.2309-02	.1610-02	.3040	2.329	545.6
197	180.00	.75000	1082.0	.3140-01	.3930-01	.4580-01	.9220	.2342-02	.1604-02	.2920	2.310	553.2
198	180.00	.77100	1247.0	.3200-01	.3980-01	.4600-01	.9220	.2351-02	.1636-02	.3080	2.432	546.4
197	180.00	.80000	1083.0	.3480-01	.4360-01	.5080-01	.9220	.2598-02	.1777-02	.3230	2.424	553.6
198	180.00	.93900	1260.0	.4670-01	.5770-01	.6650-01	.9220	.3397-02	.2384-02	.4580	3.315	542.6
197	180.00	.96700	1085.0	.6150-01	.8130-01	.9500-01	.9277	.4854-02	.3145-02	.4750	3.333	584.2
197	180.00	.98000	1086.0	.6160-01	.8180-01	.9570-01	.9277	.4892-02	.3148-02	.4690	3.300	586.1
197	180.00	.99400	1087.0	.6570-01	.8800-01	.1037	.9277	.5303-02	.3357-02	.4860	3.389	590.4
199	198.00	.95300	1276.0	.6140-01	.8020-01	.9120-01	.9304	.4658-02	.3136-02	.4910	3.607	578.2
199	198.00	.96700	1280.0	.7240-01	.9510-01	.1085	.9304	.5542-02	.3698-02	.5680	4.116	581.0
199	198.00	.98000	1284.0	.7970-01	.1055	.1208	.9304	.6169-02	.4070-02	.6110	4.405	584.5
197	225.00	.11500	1088.0	.1130	.1451	.1722	.9223	.8803-02	.5777-02	.9600	7.042	568.9
197	225.00	.17700	1090.0	.3520-01	.4340-01	.4990-01	.9223	.2552-02	.1798-02	.3480	2.584	541.8
197	225.00	.60000	1091.0	.3620-01	.4500-01	.5210-01	.9223	.2661-02	.1848-02	.3460	2.562	548.1
197	225.00	.70000	1092.0	.3660-01	.4550-01	.5270-01	.9223	.2694-02	.1868-02	.3480	2.607	548.6
198	225.00	.72400	1233.0	.3720-01	.4600-01	.5290-01	.9223	.2701-02	.1899-02	.3650	2.820	542.3
198	225.00	.74000	1239.0	.3500-01	.4330-01	.4990-01	.9223	.2547-02	.1787-02	.3420	2.643	543.5
198	225.00	.75000	1244.0	.3430-01	.4250-01	.4900-01	.9223	.2502-02	.1753-02	.3350	2.608	543.8
198	225.00	.77100	1248.0	.3400-01	.4220-01	.4860-01	.9223	.2482-02	.1738-02	.3310	2.571	544.2
197	225.00	.80000	1093.0	.4020-01	.5020-01	.5830-01	.9223	.2978-02	.2057-02	.3800	2.812	550.4
198	225.00	.93200	1254.0	.3520-01	.4320-01	.4950-01	.9223	.2526-02	.1796-02	.3550	2.570	537.1
198	225.00	.93900	1261.0	.4800-01	.5920-01	.6800-01	.9223	.3472-02	.2449-02	.4750	3.405	540.9
199	238.00	.95300	1277.0	.1136	.1487	.1603	.9384	.8186-02	.5604-02	.9030	6.568	579.1
199	238.00	.96700	1281.0	.1441	.1908	.2064	.9384	.1054-01	.7360-02	1.104	8.140	584.7
199	238.00	.98000	1285.0	.1517	.2032	.2206	.9384	.1127-01	.7750-02	1.125	8.273	589.6
197	256.00	.11500	1094.0	.1392	.1799	.2124	.9239	.1085-01	.7113-02	1.155	8.453	572.7
197	256.00	.12800	1095.0	.6120-01	.7570-01	.8650-01	.9239	.4422-02	.3126-02	.5970	4.431	544.2
197	256.00	.14600	1096.0	.5040-01	.6240-01	.7130-01	.9239	.3645-02	.2575-02	.4910	3.645	544.4
198	256.00	.20000	1097.0	.1001	.1216	.1371	.9239	.7002-02	.5110-02	1.058	7.924	527.7
198	256.00	.40000	1098.0	.7260-01	.9020-01	.1033	.9239	.5277-02	.3709-02	.6980	4.931	546.5
198	256.00	.60000	1099.0	.7350-01	.9100-01	.1040	.9239	.5311-02	.3755-02	.7170	5.289	543.8
198	256.00	.80000	1100.0	.7170-01	.8910-01	.1020	.9239	.5208-02	.3661-02	.6890	5.111	546.5
198	256.00	.87500	1101.0	.7190-01	.8880-01	.1011	.9239	.5165-02	.3674-02	.7120	5.043	541.0
198	270.00	.50000-01	1102.0	.2922	.3804	.3967	.9432	.2026-01	.1492-01	2.364	17.27	576.4
198	270.00	.10000+00	1103.0	.2831	.3686	.3843	.9432	.1962-01	.1446-01	2.290	16.73	576.4
198	270.00	.11500	1104.0	.1403	.1803	.2108	.9246	.1077-01	.7165-02	1.186	8.697	569.2
198	270.00	.14600	1105.0	.5410-01	.6680-01	.7570-01	.9246	.3866-02	.2764-02	.5370	3.995	540.5
198	270.00	.72400	1234.0	.7890-01	.9790-01	.1115	.9246	.5692-02	.4031-02	.7650	5.696	545.0
198	270.00	.74000	1240.0	.7870-01	.9800-01	.1119	.9246	.5712-02	.4019-02	.7510	5.602	548.0
198	270.00	.93200	1255.0	.8370-01	.1035	.1177	.9246	.6008-02	.4274-02	.8200	5.952	543.0
198	270.00	.95300	1110.0	.1935	.2529	.2622	.9442	.1339-01	.9880-02	1.545	10.84	578.4
198	270.00	.96700	1111.0	.2253	.2961	.3074	.9442	.1570-01	.1151-01	1.768	12.47	581.1
198	270.00	.98000	1112.0	.2334	.3085	.3205	.9442	.1637-01	.1192-01	1.799	12.59	583.8

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, LEFT SRB CLEAN, HU/HREF

(RVZL70)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
198	270.00	.99400	1113.0	.2315	.3060	.3179	.9442	.1624-01	.1182-01	1.783	12.56	584.0
198	284.00	.11500	1114.0	.1558	.2012	.2353	.9252	.1202-01	.7955-02	1.294	9.471	572.2
198	284.00	.14600	1116.0	.6230-01	.7690-01	.8700-01	.9252	.4441-02	.3182-02	.6170	4.587	540.9
198	284.00	.20000	1117.0	.9610-01	.1195	.1359	.9252	.6939-02	.4909-02	.9220	6.841	546.9
198	284.00	.40000	1118.0	.9170-01	.1142	.1300	.9252	.6637-02	.4683-02	.8740	6.190	548.1
198	284.00	.87500	1121.0	.9130-01	.1131	.1283	.9252	.6553-02	.4663-02	.8880	6.342	544.3
199	302.00	.98000	1282.0	.2482	.3336	.3428	.9461	.1751-01	.1268-01	1.821	13.25	591.1
199	302.00	.99400	1286.0	.2526	.3444	.3545	.9461	.1811-01	.1290-01	1.779	12.29	596.8
198	315.00	.92500	1122.0	.1654	.2132	.2490	.9252	.1271-01	.8444-02	1.382	10.13	571.1
198	315.00	.95300	1125.0	.9860-01	.1226	.1394	.9252	.7120-02	.5034-02	.9450	7.006	547.1
198	315.00	.98000	1127.0	.8940-01	.1113	.1268	.9252	.6474-02	.4565-02	.8510	6.204	548.3
198	315.00	.99400	1128.0	.9090-01	.1130	.1284	.9252	.6556-02	.4644-02	.8750	6.447	546.3
198	315.00	.70000	1129.0	.8680-01	.1082	.1232	.9252	.6292-02	.4434-02	.8260	6.158	548.6
198	315.00	.72400	1235.0	.9190-01	.1143	.1300	.9252	.6639-02	.4692-02	.8800	6.655	547.3
198	315.00	.74000	1241.0	.8810-01	.1097	.1248	.9252	.6375-02	.4500-02	.8410	6.428	547.8
198	315.00	.75000	1245.0	.8800-01	.1099	.1253	.9252	.6400-02	.4493-02	.8290	6.368	550.3
198	315.00	.77100	1250.0	.8870-01	.1110	.1268	.9252	.6474-02	.4531-02	.8300	6.556	551.6
198	315.00	.80000	1130.0	.9150-01	.1143	.1304	.9252	.6658-02	.4672-02	.8610	6.483	550.5
198	315.00	.87500	1131.0	.8980-01	.1115	.1267	.9252	.6469-02	.4588-02	.8680	6.170	545.7
198	315.00	1265.0	1132.0	.8670-01	.1076	.1222	.9252	.6240-02	.4429-02	.8390	5.988	545.3
198	315.00	1074.0	1256.0	.9300-01	.1153	.1309	.9252	.6685-02	.4748-02	.9010	6.427	545.1
198	315.00	1076.0	1133.0	.2156	.2851	.2935	.9456	.1499-01	.1101-01	1.660	11.58	584.0
198	315.00	1077.0	1134.0	.2419	.3213	.3308	.9456	.1690-01	.1235-01	1.837	12.97	586.1
198	315.00	1057.0	1135.0	.2504	.3328	.3427	.9456	.1750-01	.1279-01	1.897	13.26	586.4
198	315.00	1058.0	1136.0	.2415	.3245	.3346	.9456	.1709-01	.1233-01	1.771	12.24	591.1
198	330.00	.72400	1236.0	.5100-01	.6320-01	.7200-01	.9245	.3675-02	.2605-02	.4960	3.848	544.4
198	335.00	.43000-01	1212.0	.2864	.3744	.3933	.9422	.2008-01	.1462-01	2.285	16.68	578.5
198	335.00	.50000-01	1213.0	.2656	.3462	.3634	.9422	.1856-01	.1356-01	2.140	15.63	577.0
198	335.00	.57000-01	1214.0	.2709	.3520	.3693	.9422	.1886-01	.1383-01	2.205	16.12	575.4
198	335.00	.63000-01	1215.0	.2544	.3304	.3466	.9422	.1770-01	.1299-01	2.073	15.16	575.2
198	335.00	.90000-01	1216.0	.2605	.3390	.3557	.9422	.1816-01	.1330-01	2.111	15.43	576.1
199	342.00	.95300	1275.0	.1770	.2332	.2459	.9418	.1256-01	.9040-02	1.378	9.443	582.2
199	342.00	.96700	1279.0	.2030	.2693	.2845	.9418	.1453-01	.1037-01	1.545	10.81	585.6
199	342.00	.98000	1283.0	.2193	.2928	.3097	.9418	.1582-01	.1120-01	1.640	11.24	588.3
199	342.00	.99400	1287.0	.2118	.2845	.3014	.9418	.1539-01	.1082-01	1.555	10.64	590.9
197	355.00	.95300	1016.0	.1347	.1760	.1883	.9394	.9625-02	.6884-02	1.077	7.585	578.6
197	355.00	.96700	1017.0	.1689	.2227	.2389	.9394	.1221-01	.8634-02	1.313	9.286	583.0
197	355.00	.98000	1018.0	.1715	.2271	.2440	.9394	.1247-01	.8764-02	1.314	9.222	585.2
197	355.00	.99400	1019.0	.1782	.2385	.2570	.9394	.1314-01	.9111-02	1.325	9.191	589.6

LEFT SRB

PARAMETRIC DATA

ALPHA = .0000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
192	.0000	-9.000	4.020	73.00	735.0	173.8	.4680	5.294	2597.	.2259-03	.1399-06	4.193
193	-.1000-01	-9.000	4.020	72.90	735.0	173.7	.4670	5.288	2596.	.2258-03	.1398-06	4.192
200	-.1000-01	-9.000	4.020	73.00	735.0	173.7	.4680	5.294	2596.	.2261-03	.1398-06	4.197

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
192	.5111-01	.1125-01
193	.5108-01	.1125-01
200	.5111-01	.1125-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
200	.00000	.11500	1000.0	.1306	.1655	.1946	.9220	.9948-02	.6673-02	1.162	8.559	560.8
200	.00000	.20000	1001.0	.3760-01	.4640-01	.5330-01	.9220	.2725-02	.1921-02	.3730	2.776	540.8
200	.00000	.25000	1003.0	.4180-01	.5170-01	.5950-01	.9220	.3043-02	.2138-02	.4120	3.064	542.2
200	.00000	.30000	1004.0	.4690-01	.5780-01	.6650-01	.9220	.3398-02	.2397-02	.4660	3.468	540.5
200	.00000	.50000	1006.0	.3170-01	.3910-01	.4480-01	.9220	.2292-02	.1622-02	.3180	2.335	539.0
200	.00000	.55000	1007.0	.2920-01	.3590-01	.4120-01	.9220	.2105-02	.1492-02	.2940	2.158	538.2
200	.00000	.60000	1008.0	.3050-01	.3740-01	.4280-01	.9220	.2186-02	.1557-02	.3100	2.315	535.7
200	.00000	.65000	1009.0	.2880-01	.3530-01	.4050-01	.9220	.2070-02	.1470-02	.2900	2.149	537.4
200	.00000	.70000	1010.0	.2670-01	.3280-01	.3760-01	.9220	.1922-02	.1363-02	.2690	2.070	537.9
192	.00000	.72400	1232.0	.2910-01	.3560-01	.4060-01	.9220	.2077-02	.1489-02	.3020	2.325	532.7
192	.00000	.74000	1242.0	.2810-01	.3450-01	.3950-01	.9220	.2020-02	.1435-02	.2840	2.229	537.4
200	.00000	.75000	1011.0	.2830-01	.3480-01	.3990-01	.9220	.2042-02	.1445-02	.2840	2.263	538.8
192	.00000	.77100	1251.0	.2870-01	.3520-01	.4040-01	.9220	.2066-02	.1465-02	.2890	2.288	538.3
200	.00000	.80000	1012.0	.3030-01	.3730-01	.4290-01	.9220	.2191-02	.1548-02	.3030	2.330	539.6
200	.00000	.87500	1013.0	.2370-01	.2910-01	.3330-01	.9220	.1703-02	.1210-02	.2400	1.711	537.1
192	.00000	.93200	1257.0	.2890-01	.3540-01	.4040-01	.9220	.2067-02	.1477-02	.2970	2.116	534.5
192	4.3800	.96500	1220.0	.9130-01	.1150	.1271	.9317	.6495-02	.4666-02	.8320	6.240	557.2
192	4.3800	.97500	1221.0	.9270-01	.1180	.1311	.9317	.6700-02	.4736-02	.8110	6.043	564.2

IH72, LEFT SRB CLEAN, HU/HREF (RVZL71)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
192	4.3800	.98500	1222.0	.1034	.1322	.1472	.9317	.7525-02	.5284-02	.8910	6.564	566.9
192	4.3800	.99500	1223.0	.1083	.1391	.1552	.9317	.7933-02	.5534-02	.9190	6.739	569.4
192	5.0000	.50000-01	1209.0	.5050-01	.6150-01	.6700-01	.9310	.3427-02	.2583-02	.5330	4.012	529.3
192	5.0000	.90000-01	1210.0	.1481	.1908	.2143	.9310	.1095-01	.7568-02	1.243	9.106	571.2
192	5.0000	10.000	1211.0	.1710	.2207	.2482	.9310	.1268-01	.8740-02	1.428	10.45	572.2
192	20.000	.96500	1224.0	.9450-01	.1182	.1318	.9294	.6737-02	.4829-02	.8850	6.549	552.1
192	20.000	.97500	1225.0	.8330-01	.1045	.1167	.9294	.5962-02	.4259-02	.7740	5.719	553.8
192	20.000	.98500	1226.0	.8080-01	.1016	.1136	.9294	.5805-02	.4131-02	.7430	5.526	555.5
192	35.000	10.000	1208.0	.1296	.1633	.1854	.9271	.9475-02	.6623-02	1.180	8.701	557.4
192	40.000	.96500	1228.0	.9450-01	.1191	.1352	.9272	.6912-02	.4829-02	.8580	6.369	557.8
192	40.000	.97500	1229.0	.6910-01	.8680-01	.9820-01	.9272	.5018-02	.3533-02	.6400	4.757	554.4
192	40.000	.99500	1231.0	.5710-01	.7220-01	.8210-01	.9272	.4196-02	.2918-02	.5130	3.782	559.6
200	45.000	.11500	1020.0	.7030-01	.8810-01	.1026	.9220	.5244-02	.3591-02	.6530	4.828	553.1
200	45.000	.14300	1021.0	.1790-01	.2190-01	.2500-01	.9220	.1276-02	.9145-03	.1850	1.382	532.7
200	45.000	.17100	1022.0	.1330-01	.1610-01	.1840-01	.9220	.9380-03	.6782-03	.1400	1.051	528.0
200	45.000	.20000	1023.0	.1040-01	.1260-01	.1440-01	.9220	.7342-03	.5309-03	.1100	.8230	528.0
200	45.000	.40000	1025.0	.2130-01	.2620-01	.3000-01	.9220	.1531-02	.1090-02	.2170	1.564	536.1
200	45.000	.50000	1026.0	.2460-01	.3020-01	.3470-01	.9220	.1772-02	.1257-02	.2480	1.827	537.9
200	45.000	.55000	1027.0	.2810-01	.3450-01	.3960-01	.9220	.2024-02	.1437-02	.2840	2.103	537.3
200	45.000	.65000	1029.0	.3330-01	.4100-01	.4710-01	.9220	.2406-02	.1702-02	.3330	2.466	539.1
200	45.000	.70000	1030.0	.3790-01	.4670-01	.5370-01	.9220	.2746-02	.1937-02	.3770	2.851	540.5
200	45.000	.80000	1031.0	.4150-01	.5110-01	.5870-01	.9220	.2998-02	.2119-02	.4140	3.135	539.6
200	45.000	.87500	1032.0	.3510-01	.4320-01	.4950-01	.9220	.2531-02	.1795-02	.3540	2.535	537.8
200	45.000	.92500	1033.0	.3570-01	.4400-01	.5050-01	.9220	.2580-02	.1826-02	.3590	2.560	538.7
192	45.000	.93200	1258.0	.3700-01	.4530-01	.5190-01	.9220	.2651-02	.1892-02	.3790	2.799	535.2
193	45.000	.93900	1264.0	.3940-01	.4850-01	.5560-01	.9220	.2841-02	.2014-02	.3970	2.915	538.2
200	50.000	.95300	1034.0	.9220-01	.1166	.1333	.9264	.6811-02	.4712-02	.8280	5.882	559.4
200	50.000	.96700	1035.0	.9580-01	.1212	.1386	.9264	.7081-02	.4897-02	.8600	6.149	559.5
200	50.000	.98000	1036.0	.1035	.1307	.1492	.9264	.7627-02	.5289-02	.9340	6.600	558.4
192	65.000	.43000-01	1200.0	.1028	.1291	.1478	.9251	.7557-02	.5254-02	.9500	7.015	554.7
192	65.000	.50000-01	1201.0	.9250-01	.1156	.1319	.9251	.6740-02	.4730-02	.8730	6.464	550.8
192	65.000	.57000-01	1202.0	.9060-01	.1131	.1290	.9251	.6593-02	.4630-02	.8560	6.339	550.5
192	65.000	.63000-01	1203.0	.7990-01	.9970-01	.1138	.9251	.5817-02	.4083-02	.7550	5.584	550.7
192	65.000	.90000-01	1204.0	.9740-01	.1222	.1399	.9251	.7153-02	.4976-02	.9000	6.652	554.5
192	65.000	.10000+00	1205.0	.1033	.1294	.1480	.9251	.7563-02	.5282-02	.9640	7.130	552.9
193	76.000	.12000	1290.0	.4490-01	.5530-01	.6360-01	.9220	.3251-02	.2293-02	.4460	3.234	540.4
193	76.000	.12700	1291.0	.2770-01	.3390-01	.3880-01	.9220	.1982-02	.1415-02	.2840	2.083	534.5
193	76.000	.13400	1292.0	.2170-01	.2650-01	.3020-01	.9220	.1545-02	.1108-02	.2250	1.639	532.4
193	76.000	.17300	1293.0	.1160-01	.1410-01	.1600-01	.9220	.8166-03	.5905-03	.1220	.9090	528.0
193	76.000	.18000	1294.0	.1120-01	.1360-01	.1550-01	.9220	.7915-03	.5727-03	.1190	.8750	527.7
193	76.000	.18600	1295.0	.1030-01	.1260-01	.1430-01	.9220	.7303-03	.5284-03	.1100	.8150	527.6
193	76.000	.19300	1296.0	.1040-01	.1260-01	.1440-01	.9220	.7339-03	.5305-03	.1100	.8190	528.2
193	76.000	.20000	1297.0	.1030-01	.1250-01	.1430-01	.9220	.7288-03	.5264-03	.1090	.8080	528.6

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, LEFT SRB CLEAN,

(RVZL71)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
200	90.000	.00000	1038.0	.9800-02	.1210-01	.1030-01	.9870	.5257-03	.4999-03	.9700-01	.7180	540.1
200	90.000	.20000-02	1039.0	.2828	.3773	.3597	.9573	.1839-01	.1445-01	2.120	15.15	588.3
200	90.000	.10000+00	1042.0	.4120-01	.5110-01	.5820-01	.9246	.2974-02	.2106-02	.3990	2.964	545.3
200	90.000	.13400	1045.0	.2350-01	.2880-01	.3290-01	.9220	.1683-02	.1201-02	.2410	1.795	534.7
200	90.000	.17300	1046.0	.1480-01	.1800-01	.2050-01	.9220	.1049-02	.7545-03	.1540	1.151	531.0
200	90.000	.18000	1047.0	.1790-01	.2180-01	.2480-01	.9220	.1267-02	.9140-03	.1880	1.408	529.1
200	90.000	.18600	1048.0	.1310-01	.1600-01	.1820-01	.9220	.9325-03	.6678-03	.1350	1.007	533.0
200	90.000	.19300	1049.0	.1330-01	.1630-01	.1860-01	.9220	.9506-03	.6802-03	.1370	1.024	533.5
200	90.000	.20000	1050.0	.1300-01	.1590-01	.1820-01	.9220	.9310-03	.6665-03	.1340	1.004	533.2
200	90.000	.25000	1051.0	.1980-01	.2430-01	.2780-01	.9220	.1422-02	.1010-02	.2000	1.488	537.3
200	90.000	.30000	1052.0	.2930-01	.3610-01	.4140-01	.9220	.2116-02	.1499-02	.2940	2.193	538.5
200	90.000	.50000	1054.0	.3330-01	.4110-01	.4730-01	.9220	.2415-02	.1700-02	.3290	2.406	541.5
200	90.000	.60000	1055.0	.5210-01	.6450-01	.7430-01	.9220	.3798-02	.2663-02	.5110	3.772	543.1
200	90.000	.75000	1057.0	.5700-01	.7070-01	.8170-01	.9220	.4177-02	.2913-02	.5520	4.311	545.5
200	90.000	.80000	1058.0	.6290-01	.7800-01	.9010-01	.9220	.4606-02	.3212-02	.6090	4.517	545.5
200	90.000	.95300	1061.0	.1722	.2241	.2639	.9250	.1349-01	.8799-02	1.395	9.863	576.5
200	90.000	.99000	1063.0	.1831	.2383	.2806	.9250	.1434-01	.9358-02	1.484	10.43	576.4
200	90.000	.99400	1064.0	.1859	.2421	.2852	.9250	.1457-01	.9502-02	1.505	10.61	576.6
200	135.00	.14300	1066.0	.7570-01	.9480-01	.1104	.9220	.5642-02	.3870-02	.7070	5.225	552.5
200	135.00	.20000	1068.0	.9300-02	.1120-01	.1270-01	.9220	.6502-03	.4728-03	.9900-01	.7450	524.9
200	135.00	.30000	1069.0	.2290-01	.2780-01	.3170-01	.9220	.1619-02	.1169-02	.2410	1.802	529.0
200	135.00	.50000	1070.0	.2580-01	.3150-01	.3600-01	.9220	.1842-02	.1317-02	.2650	1.946	533.8
200	135.00	.60000	1071.0	.3170-01	.3860-01	.4410-01	.9220	.2252-02	.1618-02	.3300	2.464	531.3
200	135.00	.70000	1072.0	.3190-01	.3910-01	.4480-01	.9220	.2292-02	.1629-02	.3230	2.446	536.9
192	135.00	.72400	1237.0	.3580-01	.4390-01	.5020-01	.9220	.2565-02	.1830-02	.3660	2.836	535.3
192	135.00	.74000	1243.0	.3760-01	.4610-01	.5270-01	.9220	.2694-02	.1921-02	.3840	2.992	535.7
192	135.00	.75000	1246.0	.3850-01	.4720-01	.5410-01	.9220	.2763-02	.1970-02	.3940	3.059	535.6
192	135.00	.77100	1252.0	.4240-01	.5200-01	.5950-01	.9220	.3041-02	.2166-02	.4320	3.323	536.0
200	135.00	.80000	1073.0	.4420-01	.5420-01	.6220-01	.9220	.3177-02	.2258-02	.4470	3.389	537.0
192	135.00	.93200	1259.0	.4020-01	.4910-01	.5610-01	.9220	.2866-02	.2057-02	.4180	3.094	532.2
193	135.00	.93900	1265.0	.4080-01	.5000-01	.5720-01	.9220	.2922-02	.2085-02	.4170	3.073	534.9
200	135.00	.95300	1074.0	.1022	.1289	.1467	.9267	.7498-02	.5225-02	.9280	6.605	557.4
193	138.00	.95300	1266.0	.1082	.1359	.1540	.9270	.7868-02	.5526-02	.9960	7.052	554.8
193	138.00	.96700	1268.0	.9130-01	.1143	.1293	.9270	.6606-02	.4662-02	.8500	6.006	552.7
193	138.00	.98000	1270.0	.7430-01	.9320-01	.1056	.9270	.5393-02	.3796-02	.6880	4.826	553.8
193	138.00	.99400	1272.0	.6590-01	.8320-01	.9460-01	.9270	.4834-02	.3369-02	.5960	4.202	558.0
193	162.00	.95300	1267.0	.9710-01	.1207	.1339	.9297	.6840-02	.4959-02	.9320	6.818	547.1
193	162.00	.96700	1269.0	.8910-01	.1110	.1233	.9297	.6300-02	.4549-02	.8460	6.205	549.1
193	162.00	.98000	1271.0	.8890-01	.1114	.1242	.9297	.6344-02	.4542-02	.8260	6.029	553.1
200	180.00	.20000	1078.0	.3880-01	.4760-01	.5450-01	.9220	.2784-02	.1981-02	.3940	2.937	536.2
200	180.00	.40000	1079.0	.3380-01	.4140-01	.4740-01	.9220	.2424-02	.1726-02	.3440	2.472	535.9
200	180.00	.60000	1080.0	.2820-01	.3440-01	.3910-01	.9220	.2000-02	.1441-02	.2960	2.210	530.0
200	180.00	.70000	1081.0	.2640-01	.3230-01	.3690-01	.9220	.1885-02	.1347-02	.2710	2.076	534.0

IH72, LEFT SRB CLEAN, HU/HREF (RVZL71)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
192	180.00	.74000	1238.0	.2940-01	.3590-01	.4100-01	.9220	.2098-02	.1501-02	.3030	2.328	533.9
200	180.00	.75000	1082.0	.2890-01	.3530-01	.4030-01	.9220	.2062-02	.1476-02	.2970	2.379	533.5
192	180.00	.77100	1247.0	.3010-01	.3680-01	.4200-01	.9220	.2148-02	.1537-02	.3100	2.466	533.6
200	180.00	.80000	1083.0	.3190-01	.3900-01	.4460-01	.9220	.2277-02	.1629-02	.3280	2.493	533.5
192	180.00	.93900	1260.0	.4690-01	.5730-01	.6550-01	.9220	.3345-02	.2398-02	.4860	3.532	533.0
200	180.00	.96700	1085.0	.1014	.1287	.1422	.9324	.7268-02	.5180-02	.8950	6.355	562.2
200	180.00	.98000	1086.0	.1054	.1350	.1497	.9324	.7653-02	.5388-02	.9040	6.421	567.2
200	180.00	.99400	1087.0	.1150	.1487	.1658	.9324	.8472-02	.5879-02	.9540	6.711	572.8
193	198.00	.95300	1276.0	.1114	.1442	.1575	.9356	.8047-02	.5688-02	.9180	6.763	573.6
193	198.00	.96700	1280.0	.1208	.1582	.1736	.9356	.8869-02	.6170-02	.9590	6.951	579.6
193	198.00	.98000	1284.0	.1301	.1719	.1894	.9356	.9674-02	.6643-02	1.003	7.232	584.0
200	225.00	.11500	1088.0	.1349	.1774	.2133	.9233	.1090-01	.6894-02	1.057	7.705	581.7
200	225.00	.17700	1090.0	.7060-01	.8850-01	.1023	.9233	.5227-02	.3606-02	.6550	4.845	553.3
200	225.00	.60000	1091.0	.6450-01	.8030-01	.9240-01	.9233	.4722-02	.3299-02	.6170	4.572	548.0
200	225.00	.70000	1092.0	.5450-01	.6840-01	.7930-01	.9233	.4052-02	.2785-02	.5020	3.744	554.8
192	225.00	.72400	1233.0	.5950-01	.7490-01	.8680-01	.9233	.4436-02	.3042-02	.5460	4.181	556.1
192	225.00	.74000	1239.0	.5680-01	.7160-01	.8320-01	.9233	.4251-02	.2904-02	.5170	3.972	557.5
192	225.00	.75000	1244.0	.5610-01	.7080-01	.8240-01	.9233	.4211-02	.2868-02	.5070	3.920	558.7
192	225.00	.77100	1248.0	.6050-01	.7640-01	.8880-01	.9233	.4540-02	.3091-02	.5460	4.206	558.8
200	225.00	.80000	1093.0	.6680-01	.8430-01	.9800-01	.9233	.5008-02	.3413-02	.6040	4.455	558.0
192	225.00	.93200	1254.0	.6130-01	.7690-01	.8890-01	.9233	.4542-02	.3135-02	.5710	4.095	553.5
192	225.00	.93900	1261.0	.7740-01	.9750-01	.1131	.9233	.5783-02	.3955-02	.7060	5.022	557.1
193	238.00	.95300	1277.0	.1090	.1515	.1615	.9421	.8247-02	.5569-02	.7290	5.240	604.1
193	238.00	.96700	1281.0	.1449	.2065	.2213	.9421	.1131-01	.7401-02	.9120	6.634	611.9
193	238.00	.98000	1285.0	.1726	.2481	.2664	.9421	.1361-01	.8814-02	1.064	7.734	614.3
200	256.00	.11500	1094.0	.1427	.1897	.2281	.9245	.1166-01	.7291-02	1.081	7.855	586.8
200	256.00	.12800	1095.0	.6280-01	.7880-01	.9050-01	.9245	.4627-02	.3211-02	.5820	4.304	553.6
200	256.00	.14600	1096.0	.5170-01	.6510-01	.7510-01	.9245	.3837-02	.2644-02	.4720	3.483	556.5
192	256.00	.20000	1097.0	.1075	.1341	.1536	.9245	.7853-02	.5492-02	1.015	7.514	550.7
192	256.00	.40000	1098.0	.7830-01	.9950-01	.1154	.9245	.5899-02	.4004-02	.6920	4.852	562.6
192	256.00	.60000	1099.0	.7790-01	.9840-01	.1138	.9245	.5817-02	.3980-02	.7000	5.126	559.5
192	256.00	.80000	1100.0	.7670-01	.9890-01	.1161	.9245	.5932-02	.3919-02	.6420	4.700	571.8
192	256.00	.87500	1101.0	.7340-01	.9430-01	.1102	.9245	.5635-02	.3752-02	.6240	4.358	569.2
192	270.00	.50000-01	1102.0	.2739	.3838	.4058	.9432	.2074-01	.1400-01	1.799	12.95	607.0
192	270.00	.10000+00	1103.0	.2603	.3608	.3806	.9432	.1945-01	.1331-01	1.757	12.67	603.4
192	270.00	.11500	1104.0	.1343	.1782	.2136	.9246	.1092-01	.6866-02	1.026	7.462	586.0
192	270.00	.14600	1105.0	.4670-01	.5910-01	.6830-01	.9246	.3492-02	.2386-02	.4180	3.077	560.4
192	270.00	.72400	1234.0	.6850-01	.8770-01	.1021	.9246	.5220-02	.3503-02	.5910	4.351	566.9
192	270.00	.74000	1240.0	.6870-01	.8850-01	.1037	.9246	.5301-02	.3511-02	.5760	4.249	571.3
192	270.00	.93200	1255.0	.6950-01	.8930-01	.1044	.9246	.5338-02	.3552-02	.5890	4.217	569.8
192	270.00	.95300	1110.0	.8060-01	.1165	.1228	.9442	.6276-02	.4119-02	.4920	3.388	616.1
192	270.00	.96700	1111.0	.1499	.2197	.2322	.9442	.1187-01	.7664-02	.8880	6.147	619.6
192	270.00	.98000	1112.0	.1872	.2751	.2910	.9442	.1487-01	.9566-02	1.100	7.565	620.5

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, LEFT SRB CLEAN.

(RVZL71)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
192	270.00	.99400	1113.0	.2496	.3611	.3808	.9442	.1946-01	.1275-01	1.518	10.53	616.4
192	284.00	.11500	1114.0	.1392	.1856	.2237	.9245	.1144-01	.7116-02	1.047	7.602	588.4
192	284.00	.14600	1116.0	.4740-01	.5990-01	.6930-01	.9245	.3540-02	.2422-02	.4260	3.141	559.5
192	284.00	.20000	1117.0	.8770-01	.1113	.1289	.9245	.6590-02	.4484-02	.7800	5.739	561.6
192	284.00	.40000	1118.0	.7960-01	.1011	.1172	.9245	.5992-02	.4069-02	.7050	4.953	562.3
192	284.00	.87500	1121.0	.6960-01	.8930-01	.1044	.9245	.5337-02	.3557-02	.5920	4.177	569.0
193	302.00	.98000	1282.0	.1571	.2246	.2409	.9421	.1231-01	.8024-02	.9800	7.060	612.9
193	302.00	.99400	1286.0	.1545	.2245	.2416	.9421	.1234-01	.7894-02	.9320	6.374	617.1
192	315.00	.92500	1122.0	.1376	.1806	.2167	.9233	.1108-01	.7033-02	1.087	7.922	581.0
192	315.00	.95300	1125.0	.7060-01	.8880-01	.1029	.9233	.5262-02	.3608-02	.6480	4.781	556.0
192	315.00	.98000	1127.0	.6550-01	.8220-01	.9520-01	.9233	.4865-02	.3346-02	.6040	4.389	554.9
192	315.00	.99400	1128.0	.6610-01	.8280-01	.9560-01	.9233	.4884-02	.3381-02	.6190	4.549	552.3
192	315.00	.70000	1129.0	.5350-01	.6770-01	.7890-01	.9233	.4032-02	.2733-02	.4780	3.545	560.5
192	315.00	.72400	1235.0	.5890-01	.7450-01	.8660-01	.9233	.4429-02	.3012-02	.5310	3.992	559.2
192	315.00	.74000	1241.0	.5880-01	.7430-01	.8660-01	.9233	.4425-02	.3004-02	.5270	4.004	559.9
192	315.00	.75000	1245.0	.5760-01	.7320-01	.8550-01	.9233	.4369-02	.2946-02	.5100	3.896	562.3
192	315.00	.77100	1250.0	.5570-01	.7100-01	.8320-01	.9233	.4252-02	.2848-02	.4860	3.817	564.7
192	315.00	.80000	1130.0	.6180-01	.7850-01	.9170-01	.9233	.4685-02	.3158-02	.5460	4.087	562.5
192	315.00	.87500	1131.0	.5410-01	.6830-01	.7940-01	.9233	.4059-02	.2763-02	.4880	3.446	559.0
192	315.00	1265.0	1132.0	.5400-01	.6830-01	.7950-01	.9233	.4061-02	.2762-02	.4870	3.452	559.2
192	315.00	1074.0	1256.0	.5930-01	.7500-01	.8730-01	.9233	.4461-02	.3032-02	.5340	3.782	559.4
192	315.00	1076.0	1133.0	.1003	.1378	.1485	.9403	.7589-02	.5126-02	.6930	4.797	600.3
192	315.00	1077.0	1134.0	.1240	.1727	.1869	.9403	.9554-02	.6340-02	.8270	5.786	605.0
192	315.00	1057.0	1135.0	.1601	.2237	.2424	.9403	.1239-01	.8182-02	1.058	7.322	606.2
192	315.00	1058.0	1136.0	.1618	.2276	.2470	.9403	.1262-01	.8272-02	1.053	7.214	608.2
192	330.00	.72400	1236.0	.2870-01	.3520-01	.4030-01	.9227	.2058-02	.1467-02	.2900	2.261	537.5
192	335.00	.43000-01	1212.0	.2083	.2787	.3077	.9361	.1573-01	.1065-01	1.549	11.24	590.0
192	335.00	.50000-01	1213.0	.1918	.2548	.2804	.9361	.1433-01	.9804-02	1.459	10.61	586.6
192	335.00	.57000-01	1214.0	.1973	.2613	.2873	.9361	.1468-01	.1009-01	1.514	11.01	585.4
192	335.00	.63000-01	1215.0	.1747	.2305	.2530	.9361	.1293-01	.8931-02	1.357	9.882	583.5
192	335.00	.90000-01	1216.0	.1875	.2486	.2734	.9361	.1397-01	.9583-02	1.434	10.43	585.9
193	342.00	.95300	1275.0	.1075	.1402	.1536	.9356	.7845-02	.5490-02	.8650	5.942	577.4
193	342.00	.96700	1279.0	.1109	.1462	.1610	.9356	.8225-02	.5663-02	.8600	6.025	583.1
193	342.00	.98000	1283.0	.1347	.1791	.1978	.9356	.1011-01	.6881-02	1.020	6.997	586.8
193	342.00	.99400	1287.0	.1351	.1805	.1998	.9356	.1021-01	.6902-02	1.009	6.909	588.9
200	355.00	.95300	1016.0	.9820-01	.1252	.1378	.9333	.7044-02	.5021-02	.8570	6.077	564.3
200	355.00	.96700	1017.0	.1060	.1369	.1516	.9333	.7746-02	.5420-02	.8850	6.289	571.8
200	355.00	.98000	1018.0	.1085	.1406	.1560	.9333	.7971-02	.5545-02	.8930	6.302	574.0
200	355.00	.99400	1019.0	.1194	.1558	.1735	.9333	.8868-02	.6102-02	.9590	6.688	577.9

LEFT SRB

PARAMETRIC DATA

ALPHA = 5.000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
194	5.040	-9.000	4.020	72.90	735.0	173.7	.4670	5.288	2596.	.2258-03	.1398-06	4.193
195	5.000	-9.000	4.020	73.00	735.0	173.6	.4680	5.293	2596.	.2261-03	.1398-06	4.198
196	4.980	-9.000	4.020	72.90	735.0	173.6	.4670	5.286	2596.	.2258-03	.1398-06	4.193

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
194	.5108-01	.1125-01
195	.5110-01	.1125-01
196	.5107-01	.1125-01

TEST DATA

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
194	.00000	.11500	1000.0	.9900-01	.1235	.1434	.9220	.7324-02	.5056-02	.9360	6.931	549.9
194	.00000	.20000	1001.0	.1420-01	.1740-01	.1990-01	.9220	.1018-02	.7260-03	.1450	1.084	534.9
194	.00000	.25000	1003.0	.2160-01	.2660-01	.3050-01	.9220	.1556-02	.1104-02	.2180	1.624	537.6
194	.00000	.30000	1004.0	.1930-01	.2370-01	.2720-01	.9220	.1391-02	.9875-03	.1950	1.455	537.3
194	.00000	.50000	1006.0	.2560-01	.3150-01	.3630-01	.9220	.1852-02	.1305-02	.2530	1.860	540.9
194	.00000	.55000	1007.0	.3120-01	.3840-01	.4420-01	.9220	.2259-02	.1592-02	.3090	2.270	540.8
194	.00000	.60000	1008.0	.3110-01	.3830-01	.4410-01	.9220	.2252-02	.1589-02	.3090	2.301	540.4
194	.00000	.65000	1009.0	.3120-01	.3860-01	.4440-01	.9220	.2268-02	.1595-02	.3080	2.275	541.8
194	.00000	.70000	1010.0	.2960-01	.3660-01	.4210-01	.9220	.2148-02	.1514-02	.2940	2.263	540.8
195	.00000	.72400	1232.0	.4850-01	.6050-01	.7030-01	.9220	.3591-02	.2476-02	.4570	3.491	550.1
195	.00000	.74000	1242.0	.3150-01	.3860-01	.4420-01	.9220	.2257-02	.1611-02	.3220	2.532	534.7
194	.00000	.75000	1011.0	.3060-01	.3780-01	.4360-01	.9220	.2226-02	.1565-02	.3020	2.407	541.9
195	.00000	.77100	1251.0	.3300-01	.4050-01	.4640-01	.9220	.2369-02	.1684-02	.3340	2.650	536.4
194	.00000	.80000	1012.0	.3240-01	.4010-01	.4620-01	.9220	.2357-02	.1655-02	.3190	2.449	542.6
194	.00000	.87500	1013.0	.2880-01	.3540-01	.4060-01	.9220	.2075-02	.1470-02	.2890	2.061	538.5
195	.00000	.93200	1257.0	.3550-01	.4340-01	.4950-01	.9220	.2532-02	.1812-02	.3650	2.607	533.2
195	4.3800	.96500	1220.0	.8620-01	.1082	.1224	.9272	.6256-02	.4403-02	.7950	5.970	554.3
195	4.3800	.97500	1221.0	.7370-01	.9220-01	.1041	.9272	.5320-02	.3765-02	.6890	5.165	551.9

IH72, LEFT SRB CLEAN,

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
195	4.3800	.98500	1222.0	.7250-01	.9100-01	.1029	.9272	.5259-02	.3704-02	.6700	4.967	554.0
195	4.3800	.99500	1223.0	.6120-01	.7760-01	.8840-01	.9272	.4516-02	.3127-02	.5440	4.005	560.9
195	5.0000	.50000-01	1209.0	.3480-01	.4240-01	.4730-01	.9267	.2415-02	.1777-02	.3630	2.731	530.7
195	5.0000	.90000-01	1210.0	.1087	.1378	.1575	.9267	.8047-02	.5553-02	.9660	7.112	560.9
195	5.0000	10.000	1211.0	.1276	.1616	.1845	.9267	.9426-02	.6521-02	1.140	8.402	559.9
195	20.000	.96500	1224.0	.8410-01	.1064	.1222	.9257	.6244-02	.4296-02	.7510	5.533	560.0
195	20.000	.97500	1225.0	.9570-01	.1206	.1381	.9257	.7056-02	.4889-02	.8690	6.409	557.1
195	20.000	.98500	1226.0	.8420-01	.1060	.1212	.9257	.6193-02	.4301-02	.7680	5.706	556.3
195	35.000	10.000	1208.0	.1041	.1304	.1497	.9245	.7650-02	.5318-02	.9680	7.159	552.8
195	40.000	.96500	1228.0	.1448	.1855	.2163	.9246	.1105-01	.7398-02	1.239	9.158	567.3
195	40.000	.97500	1229.0	.1286	.1638	.1903	.9246	.9725-02	.6569-02	1.121	8.295	564.2
195	40.000	.99500	1231.0	.9460-01	.1202	.1393	.9246	.7118-02	.4832-02	.8330	6.130	562.4
194	45.000	.11500	1020.0	.5420-01	.6790-01	.7900-01	.9220	.4035-02	.2770-02	.5070	3.749	552.1
194	45.000	.14300	1021.0	.1820-01	.2230-01	.2560-01	.9220	.1308-02	.9290-03	.1840	1.369	537.3
194	45.000	.17100	1022.0	.1560-01	.1910-01	.2190-01	.9220	.1118-02	.7980-03	.1600	1.192	534.9
194	45.000	.20000	1023.0	.1570-01	.1930-01	.2210-01	.9220	.1128-02	.8033-03	.1600	1.192	536.0
194	45.000	.40000	1025.0	.2250-01	.2780-01	.3200-01	.9220	.1636-02	.1151-02	.2220	1.600	541.8
194	45.000	.50000	1026.0	.2480-01	.3060-01	.3530-01	.9220	.1803-02	.1265-02	.2430	1.789	542.8
194	45.000	.55000	1027.0	.2850-01	.3520-01	.4050-01	.9220	.2070-02	.1453-02	.2800	2.066	542.5
194	45.000	.65000	1029.0	.3900-01	.4840-01	.5600-01	.9220	.2859-02	.1993-02	.3770	2.782	545.7
194	45.000	.70000	1030.0	.4690-01	.5840-01	.6770-01	.9220	.3456-02	.2394-02	.4470	3.366	548.4
194	45.000	.80000	1031.0	.5140-01	.6400-01	.7420-01	.9220	.3790-02	.2627-02	.4910	3.699	548.2
194	45.000	.87500	1032.0	.4560-01	.5650-01	.6520-01	.9220	.3332-02	.2330-02	.4440	3.172	544.3
194	45.000	.92500	1033.0	.4700-01	.5840-01	.6750-01	.9220	.3446-02	.2402-02	.4550	3.233	545.8
195	45.000	.93200	1258.0	.5080-01	.6250-01	.7160-01	.9220	.3661-02	.2597-02	.5120	3.776	537.7
196	45.000	.93900	1264.0	.5770-01	.7110-01	.8180-01	.9220	.4177-02	.2946-02	.5730	4.204	540.4
194	50.000	.95300	1034.0	.1513	.1970	.2331	.9244	.1191-01	.7727-02	1.223	8.621	576.7
194	50.000	.96700	1035.0	.1593	.2079	.2465	.9244	.1259-01	.8139-02	1.280	9.072	577.8
194	50.000	.98000	1036.0	.1666	.2168	.2563	.9244	.1309-01	.8512-02	1.352	9.469	576.2
195	65.000	.43000-01	1200.0	.6020-01	.7520-01	.8650-01	.9239	.4421-02	.3074-02	.5640	4.171	551.4
195	65.000	.50000-01	1201.0	.6010-01	.7510-01	.8630-01	.9239	.4408-02	.3071-02	.5660	4.190	550.5
195	65.000	.57000-01	1202.0	.6520-01	.8160-01	.9380-01	.9239	.4795-02	.3330-02	.6090	4.507	551.9
195	65.000	.63000-01	1203.0	.6010-01	.7540-01	.8680-01	.9239	.4436-02	.3073-02	.5590	4.131	553.0
195	65.000	.90000-01	1204.0	.7320-01	.9220-01	.1065	.9239	.5443-02	.3742-02	.6690	4.941	556.0
195	65.000	.10000+00	1205.0	.8220-01	.1031	.1189	.9239	.6078-02	.4199-02	.7590	5.611	554.0
196	76.000	.12000	1290.0	.4020-01	.4960-01	.5700-01	.9220	.2913-02	.2053-02	.3990	2.890	540.6
196	76.000	.12700	1291.0	.2660-01	.3260-01	.3730-01	.9220	.1905-02	.1356-02	.2700	1.979	535.9
196	76.000	.13400	1292.0	.2040-01	.2490-01	.2850-01	.9220	.1457-02	.1040-02	.2080	1.519	534.6
196	76.000	.17300	1293.0	.1400-01	.1710-01	.1950-01	.9220	.9962-03	.7140-03	.1440	1.072	532.5
196	76.000	.18000	1294.0	.1470-01	.1800-01	.2050-01	.9220	.1047-02	.7507-03	.1520	1.116	532.5
196	76.000	.18600	1295.0	.1340-01	.1640-01	.1870-01	.9220	.9574-03	.6853-03	.1380	1.025	533.1
196	76.000	.19300	1296.0	.1460-01	.1790-01	.2050-01	.9220	.1045-02	.7479-03	.1510	1.123	533.1
196	76.000	.20000	1297.0	.1510-01	.1850-01	.2110-01	.9220	.1077-02	.7701-03	.1550	1.148	533.9

IH72, LEFT SRB CLEAN, HU/HREF (RVZL72)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
194	90.000	.00000	1038.0	.8800-02	.1090-01	.9300-02	.9870	.4745-03	.4514-03	.8800-01	.6520	539.0
194	90.000	.20000-02	1039.0	.2888	.3887	.3707	.9570	.1894-01	.1475-01	2.109	15.04	592.1
194	90.000	.10000+00	1042.0	.4590-01	.5680-01	.6460-01	.9246	.3302-02	.2344-02	.4480	3.329	543.8
194	90.000	.13400	1045.0	.2020-01	.2470-01	.2830-01	.9220	.1444-02	.1032-02	.2070	1.547	534.2
194	90.000	.17300	1046.0	.1170-01	.1420-01	.1620-01	.9220	.8257-03	.5953-03	.1220	.9150	529.6
194	90.000	.18000	1047.0	.1280-01	.1550-01	.1760-01	.9220	.9015-03	.6526-03	.1350	1.015	527.4
194	90.000	.18600	1048.0	.9500-02	.1150-01	.1320-01	.9220	.6724-03	.4833-03	.9900-01	.7370	531.1
194	90.000	.19300	1049.0	.8600-02	.1050-01	.1200-01	.9220	.6119-03	.4399-03	.9000-01	.6710	531.0
194	90.000	.20000	1050.0	.8000-02	.9800-02	.1120-01	.9220	.5715-03	.4111-03	.8400-01	.6280	530.8
194	90.000	.25000	1051.0	.1240-01	.1520-01	.1730-01	.9220	.8859-03	.6330-03	.1270	.9490	534.2
194	90.000	.30000	1052.0	.2470-01	.3030-01	.3480-01	.9220	.1775-02	.1261-02	.2500	1.861	537.1
194	90.000	.50000	1054.0	.1520-01	.1860-01	.2130-01	.9220	.1090-02	.7768-03	.1550	1.138	535.3
194	90.000	.60000	1055.0	.2860-01	.3510-01	.4030-01	.9220	.2057-02	.1459-02	.2880	2.128	537.9
194	90.000	.75000	1057.0	.4270-01	.5290-01	.6100-01	.9220	.3114-02	.2183-02	.4190	3.276	543.2
194	90.000	.80000	1058.0	.4520-01	.5580-01	.6440-01	.9220	.3288-02	.2307-02	.4430	3.290	543.0
194	90.000	.95300	1061.0	.1363	.1759	.2058	.9250	.1051-01	.6962-02	1.137	8.058	571.7
194	90.000	.98000	1063.0	.1080	.1380	.1602	.9250	.8184-02	.5519-02	.9350	6.601	565.7
194	90.000	.99400	1064.0	.9400-01	.1199	.1391	.9250	.7103-02	.4801-02	.8170	5.792	564.8
194	135.00	.14300	1066.0	.8720-01	.1105	.1299	.9220	.6637-02	.4457-02	.7780	5.727	560.5
194	135.00	.20000	1068.0	.2260-01	.2770-01	.3170-01	.9220	.1617-02	.1156-02	.2320	1.734	534.0
194	135.00	.30000	1069.0	.2990-01	.3650-01	.4170-01	.9220	.2131-02	.1526-02	.3080	2.299	533.2
194	135.00	.50000	1070.0	.2440-01	.2980-01	.3410-01	.9220	.1741-02	.1244-02	.2500	1.833	534.2
194	135.00	.60000	1071.0	.3120-01	.3810-01	.4350-01	.9220	.2223-02	.1592-02	.3220	2.401	533.1
194	135.00	.70000	1072.0	.2850-01	.3500-01	.4010-01	.9220	.2047-02	.1458-02	.2900	2.202	535.8
195	135.00	.72400	1237.0	.2920-01	.3560-01	.4050-01	.9220	.2070-02	.1491-02	.3060	2.372	530.0
195	135.00	.74000	1243.0	.2870-01	.3500-01	.3990-01	.9220	.2040-02	.1469-02	.3010	2.351	530.1
195	135.00	.75000	1246.0	.3040-01	.3700-01	.4220-01	.9220	.2156-02	.1552-02	.3180	2.475	530.2
195	135.00	.77100	1252.0	.3180-01	.3870-01	.4420-01	.9220	.2257-02	.1624-02	.3320	2.557	530.5
194	135.00	.80000	1073.0	.3360-01	.4120-01	.4720-01	.9220	.2413-02	.1714-02	.3390	2.570	537.1
195	135.00	.93200	1259.0	.3610-01	.4400-01	.5000-01	.9220	.2556-02	.1847-02	.3810	2.827	528.3
196	135.00	.93900	1265.0	.3690-01	.4510-01	.5140-01	.9220	.2627-02	.1885-02	.3820	2.818	532.0
194	135.00	.95300	1074.0	.1001	.1256	.1401	.9296	.7158-02	.5115-02	.9280	6.615	553.6
196	138.00	.95300	1266.0	.9420-01	.1173	.1300	.9300	.6641-02	.4810-02	.8970	6.370	548.3
196	138.00	.96700	1268.0	.9540-01	.1197	.1332	.9300	.6804-02	.4870-02	.8810	6.219	553.9
196	138.00	.98000	1270.0	.1011	.1277	.1427	.9300	.7286-02	.5161-02	.9100	6.369	558.5
196	138.00	.99400	1272.0	.1044	.1325	.1485	.9300	.7582-02	.5332-02	.9240	6.499	561.5
196	162.00	.95300	1267.0	.9570-01	.1226	.1342	.9345	.6854-02	.4888-02	.8200	5.940	567.1
196	162.00	.96700	1269.0	.1105	.1429	.1573	.9345	.8031-02	.5643-02	.9140	6.621	572.9
196	162.00	.98000	1271.0	.1243	.1618	.1785	.9345	.9115-02	.6346-02	1.005	7.246	576.5
194	180.00	.20000	1078.0	.6930-01	.8720-01	.1015	.9228	.5183-02	.3541-02	.6340	4.681	555.9
194	180.00	.40000	1079.0	.5730-01	.7150-01	.8270-01	.9228	.4226-02	.2926-02	.5400	3.852	550.6
194	180.00	.60000	1080.0	.5080-01	.6330-01	.7300-01	.9228	.3728-02	.2597-02	.4860	3.599	548.0
194	180.00	.70000	1081.0	.4220-01	.5290-01	.6130-01	.9228	.3133-02	.2153-02	.3900	2.965	553.7

IH72, LEFT SRB CLEAN,

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
195	180.00	.74000	1238.0	.4900-01	.6140-01	.7110-01	.9228	.3632-02	.2506-02	.4590	3.498	551.8
194	180.00	.75000	1082.0	.4500-01	.5650-01	.6570-01	.9228	.3356-02	.2296-02	.4130	3.264	555.3
195	180.00	.77100	1247.0	.4930-01	.6180-01	.7160-01	.9228	.3660-02	.2521-02	.4590	3.613	552.6
194	180.00	.80000	1083.0	.5080-01	.6400-01	.7450-01	.9228	.3807-02	.2594-02	.4620	3.465	557.0
195	180.00	.93900	1260.0	.5940-01	.7420-01	.8580-01	.9228	.4385-02	.3036-02	.5600	4.037	550.4
194	180.00	.96700	1085.0	.1149	.1561	.1703	.9383	.8698-02	.5870-02	.8180	5.713	595.6
194	180.00	.98000	1086.0	.1372	.1874	.2049	.9383	.1047-01	.7006-02	.9600	6.715	598.0
194	180.00	.99400	1087.0	.1517	.2081	.2279	.9383	.1164-01	.7747-02	1.050	7.291	599.5
196	198.00	.95300	1276.0	.1142	.1585	.1692	.9418	.8639-02	.5833-02	.7680	5.572	603.2
196	198.00	.96700	1280.0	.1524	.2140	.2291	.9418	.1170-01	.7784-02	.9940	7.108	607.1
196	198.00	.98000	1284.0	.1805	.2546	.2730	.9418	.1394-01	.9215-02	1.162	8.275	608.7
194	225.00	.11500	1088.0	.1497	.2015	.2434	.9252	.1243-01	.7646-02	1.093	7.921	592.1
194	225.00	.17700	1090.0	.9160-01	.1177	.1371	.9252	.7001-02	.4680-02	.7770	5.695	569.1
194	225.00	.60000	1091.0	.8250-01	.1056	.1226	.9252	.6263-02	.4213-02	.7080	5.197	567.0
194	225.00	.70000	1092.0	.6580-01	.8530-01	.1000+00	.9252	.5110-02	.3362-02	.5410	3.994	574.2
195	225.00	.72400	1233.0	.7370-01	.9550-01	.1119	.9252	.5719-02	.3766-02	.6060	4.605	573.8
195	225.00	.74000	1239.0	.7210-01	.9340-01	.1096	.9252	.5599-02	.3683-02	.5920	4.512	574.1
195	225.00	.75000	1244.0	.7100-01	.9230-01	.1086	.9252	.5548-02	.3626-02	.5760	4.414	576.0
195	225.00	.77100	1248.0	.7720-01	.1007	.1185	.9252	.6057-02	.3945-02	.6220	4.751	577.1
194	225.00	.80000	1093.0	.8140-01	.1067	.1261	.9252	.6442-02	.4158-02	.6450	4.704	579.9
195	225.00	.93200	1254.0	.7240-01	.9320-01	.1089	.9252	.5562-02	.3698-02	.6070	4.315	570.8
195	225.00	.93900	1261.0	.9270-01	.1204	.1414	.9252	.7225-02	.4735-02	.7560	5.330	575.2
196	238.00	.95300	1277.0	.8100-01	.1187	.1232	.9461	.6291-02	.4136-02	.4780	3.411	619.2
196	238.00	.96700	1281.0	.1554	.2317	.2409	.9461	.1230-01	.7937-02	.8860	6.411	623.2
196	238.00	.98000	1285.0	.1836	.2748	.2859	.9461	.1460-01	.9374-02	1.037	7.500	624.2
194	256.00	.11500	1094.0	.1452	.1948	.2345	.9252	.1198-01	.7416-02	1.071	7.768	590.6
194	256.00	.12800	1095.0	.6410-01	.8090-01	.9300-01	.9252	.4750-02	.3273-02	.5790	4.268	558.2
194	256.00	.14600	1096.0	.5180-01	.6580-01	.7600-01	.9252	.3883-02	.2647-02	.4570	3.366	562.2
195	256.00	.20000	1097.0	.1140	.1432	.1641	.9252	.8387-02	.5824-02	1.048	7.739	554.9
195	256.00	.40000	1098.0	.8690-01	.1107	.1280	.9252	.6541-02	.4440-02	.7600	5.321	563.7
195	256.00	.60000	1099.0	.8360-01	.1063	.1229	.9252	.6278-02	.4271-02	.7340	5.363	563.0
195	256.00	.80000	1100.0	.8250-01	.1079	.1274	.9252	.6508-02	.4218-02	.6590	4.807	578.7
195	256.00	.87500	1101.0	.7870-01	.1024	.1204	.9252	.6152-02	.4023-02	.6390	4.446	576.0
195	270.00	.50000-01	1102.0	.2760	.3868	.4091	.9432	.2090-01	.1410-01	1.809	13.02	606.6
195	270.00	.10000+00	1103.0	.2557	.3523	.3713	.9432	.1897-01	.1306-01	1.750	12.63	600.9
195	270.00	.11500	1104.0	.1367	.1811	.2168	.9246	.1108-01	.6985-02	1.047	7.618	585.0
195	270.00	.14600	1105.0	.4790-01	.6040-01	.6970-01	.9246	.3563-02	.2447-02	.4330	3.190	558.0
195	270.00	.72400	1234.0	.6650-01	.8510-01	.9920-01	.9246	.5068-02	.3398-02	.5710	4.206	566.8
195	270.00	.74000	1240.0	.6880-01	.8870-01	.1040	.9246	.5312-02	.3517-02	.5760	4.250	571.0
195	270.00	.93200	1255.0	.7380-01	.9510-01	.1114	.9246	.5695-02	.3773-02	.6190	4.434	570.7
195	270.00	.95300	1110.0	.8490-01	.1229	.1296	.9442	.6623-02	.4341-02	.5170	3.560	615.8
195	270.00	.96700	1111.0	.1527	.2236	.2364	.9442	.1208-01	.7805-02	.9050	6.266	618.9
195	270.00	.98000	1112.0	.1839	.2701	.2857	.9442	.1460-01	.9399-02	1.082	7.445	619.7

IH72, LEFT SRB CLEAN, HU/HREF

(RVZL72)

RUN NUMBER	PHI	X/LS	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
195	270.00	.99400	1113.0	.2546	.3688	.3891	.9442	.1988-01	.1301-01	1.543	10.70	616.2
195	284.00	.11500	1114.0	.1359	.1794	.2155	.9239	.1101-01	.6942-02	1.051	7.653	583.4
195	284.00	.14600	1116.0	.4370-01	.5490-01	.6330-01	.9239	.3234-02	.2235-02	.4050	2.993	553.7
195	284.00	.20000	1117.0	.8340-01	.1052	.1218	.9239	.6226-02	.4259-02	.7540	5.564	557.7
195	284.00	.40000	1118.0	.7490-01	.9410-01	.1088	.9239	.5558-02	.3825-02	.6860	4.840	555.4
195	284.00	.87500	1121.0	.6280-01	.7990-01	.9310-01	.9239	.4759-02	.3208-02	.5510	3.894	563.2
196	302.00	.98000	1282.0	.1449	.1969	.2148	.9384	.1097-01	.7401-02	1.030	7.477	595.7
196	302.00	.99400	1286.0	.1351	.1865	.2046	.9384	.1045-01	.6898-02	.9190	6.335	601.6
195	315.00	.92500	1122.0	.1181	.1526	.1821	.9223	.9308-02	.6035-02	.9800	7.177	572.4
195	315.00	.95300	1125.0	.5390-01	.6690-01	.7730-01	.9223	.3950-02	.2754-02	.5190	3.852	546.3
195	315.00	.98000	1127.0	.4580-01	.5660-01	.6520-01	.9223	.3331-02	.2340-02	.4490	3.281	543.0
195	315.00	.99400	1128.0	.4230-01	.5200-01	.5970-01	.9223	.3050-02	.2159-02	.4220	3.123	539.3
195	315.00	.70000	1129.0	.3710-01	.4610-01	.5310-01	.9223	.2715-02	.1898-02	.3610	2.695	544.9
195	315.00	.72400	1235.0	.4110-01	.5080-01	.5850-01	.9223	.2990-02	.2098-02	.4020	3.046	543.3
195	315.00	.74000	1241.0	.3800-01	.4710-01	.5430-01	.9223	.2776-02	.1941-02	.3690	2.822	544.9
195	315.00	.75000	1245.0	.3890-01	.4830-01	.5580-01	.9223	.2851-02	.1987-02	.3740	2.881	546.4
195	315.00	.77100	1250.0	.3530-01	.4390-01	.5080-01	.9223	.2597-02	.1803-02	.3370	2.666	548.0
195	315.00	.80000	1130.0	.4040-01	.5030-01	.5810-01	.9223	.2970-02	.2066-02	.3880	2.923	547.2
195	315.00	.87500	1131.0	.3380-01	.4190-01	.4830-01	.9223	.2466-02	.1728-02	.3300	2.348	544.0
195	315.00	1265.0	1132.0	.3740-01	.4630-01	.5330-01	.9223	.2726-02	.1910-02	.3650	2.603	544.0
195	315.00	1074.0	1256.0	.4100-01	.5090-01	.5870-01	.9223	.2998-02	.2098-02	.3990	2.847	544.7
195	315.00	1076.0	1133.0	.9770-01	.1275	.1397	.9357	.7140-02	.4995-02	.7860	5.500	577.5
195	315.00	1077.0	1134.0	.1077	.1425	.1571	.9357	.8029-02	.5503-02	.8270	5.842	584.6
195	315.00	1057.0	1135.0	.1287	.1714	.1893	.9357	.9675-02	.6579-02	.9720	6.791	587.1
195	315.00	1058.0	1136.0	.1308	.1752	.1941	.9357	.9919-02	.6686-02	.9690	6.701	589.8
195	330.00	.72400	1236.0	.3180-01	.3890-01	.4460-01	.9220	.2277-02	.1624-02	.3240	2.528	535.2
195	335.00	.43000-01	1212.0	.1699	.2201	.2480	.9310	.1267-01	.8684-02	1.399	10.24	573.7
195	335.00	.50000-01	1213.0	.1496	.1929	.2166	.9310	.1107-01	.7646-02	1.253	9.181	570.9
195	335.00	.57000-01	1214.0	.1490	.1922	.2159	.9310	.1103-01	.7614-02	1.245	9.122	571.3
195	335.00	.63000-01	1215.0	.1319	.1701	.1912	.9310	.9768-02	.6740-02	1.102	8.075	571.3
195	335.00	.90000-01	1216.0	.1527	.1974	.2222	.9310	.1135-01	.7801-02	1.265	9.256	572.7
196	342.00	.95300	1275.0	.9880-01	.1238	.1375	.9304	.7022-02	.5045-02	.9160	6.368	553.2
196	342.00	.96700	1279.0	.9570-01	.1208	.1346	.9304	.6873-02	.4887-02	.8650	6.131	557.9
196	342.00	.98000	1283.0	.1019	.1294	.1447	.9304	.7391-02	.5203-02	.8990	6.238	562.1
196	342.00	.99400	1287.0	.1045	.1335	.1498	.9304	.7649-02	.5338-02	.9030	6.259	565.6
194	355.00	.95300	1016.0	.9480-01	.1195	.1346	.9284	.6876-02	.4844-02	.8630	6.139	556.9
194	355.00	.96700	1017.0	.8710-01	.1095	.1232	.9284	.6292-02	.4447-02	.7980	5.720	555.6
194	355.00	.98000	1018.0	.8580-01	.1081	.1217	.9284	.6216-02	.4385-02	.7830	5.577	556.3
194	355.00	.99400	1019.0	.8620-01	.1095	.1239	.9284	.6330-02	.4404-02	.7620	5.358	562.0

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
30	.2000-01	.0000	3.010	37.10	689.0	245.2	.9950	6.309	2309.	.3405-03	.1964-06	4.004
31	-.4000-01	.0000	3.010	37.10	690.0	245.3	.9950	6.307	2310.	.3402-03	.1965-06	3.999
32	-.4000-01	.0000	3.010	37.20	690.0	245.3	.9970	6.322	2310.	.3409-03	.1965-06	4.008
33	-.4000-01	.0000	3.010	37.00	690.0	245.5	.9910	6.286	2311.	.3388-03	.1966-06	3.982
34	-.4000-01	.0000	3.010	37.00	693.0	246.6	.9910	6.286	2316.	.3372-03	.1975-06	3.955
35	-.2000-01	.0000	3.010	37.00	695.0	247.3	.9910	6.288	2319.	.3364-03	.1980-06	3.941

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
30	.5526-01	.9079-02
31	.5525-01	.9084-02
32	.5531-01	.9074-02
33	.5516-01	.9103-02
34	.5520-01	.9130-02
35	.5523-01	.9144-02

TEST DATA

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TH DEG. R
31	.00000	.25000-01	2187.0	.4966	.7228	.6017	.9721	.3324-01	.2744-01	3.025	21.02	579.6
31	.00000	.30000-01	2188.0	.5179	.7631	.6320	.9719	.3492-01	.2862-01	3.072	21.45	582.4
30	.00000	.40000-01	600.00	.4950	.6849	.6016	.9681	.3324-01	.2735-01	3.401	21.66	565.1
30	.00000	.50000-01	601.00	.4521	.6264	.5632	.9645	.3112-01	.2498-01	3.094	19.77	565.5
30	.00000	.70000-01	603.00	.3329	.4501	.4258	.9581	.2353-01	.1840-01	2.436	16.54	557.0
30	.00000	.80000-01	604.00	.3190	.4286	.4138	.9552	.2287-01	.1763-01	2.377	15.40	554.6
30	.00000	.15000	606.00	.1629	.2103	.2226	.9404	.1230-01	.9002-02	1.378	10.07	536.3
30	.00000	.20000	607.00	.1025	.1301	.1411	.9355	.7795-02	.5665-02	.9210	6.072	526.8
30	.00000	.21000	608.00	.8360-01	.1079	.1182	.9350	.6531-02	.4620-02	.7070	4.913	536.3
30	.00000	.22000	609.00	.7000-01	.9020-01	.9890-01	.9347	.5463-02	.3869-02	.5960	4.464	535.2
30	.00000	.30000	610.00	.6390-01	.8200-01	.8990-01	.9345	.4968-02	.3531-02	.5510	3.797	533.4
30	.00000	.35000	611.00	.6140-01	.7870-01	.8620-01	.9345	.4762-02	.3395-02	.5340	3.584	532.1

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT05)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
30	.00000	.36000	612.00	.6640-01	.8530-01	.9360-01	.9345	.5172-02	.3669-02	.5700	3.858	534.0
30	.00000	.37000	613.00	.8510-01	.1107	.1221	.9345	.6744-02	.4705-02	.7030	4.738	540.1
30	.00000	.37500	614.00	.8830-01	.1147	.1265	.9345	.6989-02	.4877-02	.7290	4.914	540.0
32	.00000	.38000	615.00	.8040-01	.1051	.1162	.9345	.6430-02	.4446-02	.6510	4.382	543.5
32	.00000	.38500	616.00	.7880-01	.1030	.1139	.9345	.6300-02	.4358-02	.6390	4.299	543.3
32	.00000	.39500	618.00	.8480-01	.1132	.1264	.9345	.6990-02	.4691-02	.6450	4.334	552.5
32	.00000	.40000	619.00	.9420-01	.1270	.1424	.9345	.7874-02	.5210-02	.6960	4.639	556.3
32	.00000	.40500	620.00	.1167	.1562	.1745	.9345	.9650-02	.6458-02	.8820	5.909	553.3
32	.00000	.41000	621.00	.1385	.1874	.2104	.9345	.1164-01	.7662-02	1.013	6.772	557.6
32	.00000	.41500	622.00	.1558	.2121	.2388	.9345	.1321-01	.8620-02	1.121	7.464	559.8
32	.00000	.43000	625.00	.2167	.3026	.3449	.9345	.1908-01	.1199-01	1.458	9.694	568.3
32	.00000	.44000	626.00	.2769	.4018	.4671	.9345	.2584-01	.1531-01	1.699	11.24	578.9
32	.00000	.44500	627.00	.2872	.4172	.4854	.9345	.2685-01	.1589-01	1.758	11.73	579.2
32	.00000	.45000	628.00	.2528	.3525	.4015	.9345	.2221-01	.1398-01	1.706	11.45	567.9
32	.00000	.45500	629.00	.2034	.2753	.3091	.9345	.1710-01	.1125-01	1.486	10.18	557.8
30	.00000	.46000	630.00	.1610	.2176	.2442	.9345	.1349-01	.8895-02	1.179	7.885	556.9
30	.00000	.47000	631.00	.1430	.1889	.2097	.9345	.1159-01	.7902-02	1.122	7.539	547.4
30	.00000	.48000	632.00	.1754	.2418	.2740	.9345	.1514-01	.9689-02	1.215	8.147	564.0
30	.00000	.49000	633.00	.1616	.2235	.2536	.9345	.1401-01	.8929-02	1.111	7.515	565.0
30	.00000	.50000	634.00	.1456	.1979	.2227	.9345	.1231-01	.8043-02	1.048	7.290	559.1
30	.00000	.55000	635.00	.1175	.1557	.1733	.9345	.9574-02	.6490-02	.9100	6.035	549.2
30	.00000	.60000	636.00	.1188	.1556	.1720	.9345	.9506-02	.6566-02	.9590	6.193	543.4
30	.00000	.65000	637.00	.1231	.1616	.1789	.9345	.9887-02	.6804-02	.9850	6.378	544.6
30	.00000	.70000	638.00	.9120-01	.1186	.1307	.9345	.7224-02	.5039-02	.7530	5.169	540.1
30	.00000	.75000	639.00	.5800-01	.7440-01	.8160-01	.9345	.4507-02	.3206-02	.5020	3.259	532.9
30	.00000	.80000	640.00	.7570-01	.9840-01	.1084	.9345	.5990-02	.4185-02	.6270	3.944	539.6
30	.00000	.85000	641.00	.1055	.1397	.1554	.9345	.8585-02	.5830-02	.8200	5.180	548.7
30	.00000	.87000	643.00	.1201	.1616	.1809	.9345	.9997-02	.6638-02	.8920	5.730	555.0
30	.00000	.88000	644.00	.1335	.1811	.2037	.9345	.1125-01	.7376-02	.9670	6.253	558.3
32	.00000	.95000	649.00	.4670-01	.6130-01	.6800-01	.9345	.3759-02	.2581-02	.3720	2.716	545.7
35	5.6250	.42500	2170.0	.1473	.2046	.2326	.9345	.1285-01	.8135-02	1.010	6.492	571.1
35	5.6250	.43000	2175.0	.2072	.2983	.3454	.9345	.1908-01	.1145-01	1.303	8.332	581.5
35	5.6250	.44000	2180.0	.2054	.3046	.3582	.9345	.1978-01	.1135-01	1.212	7.720	588.5
32	11.250	.35000	650.00	.6840-01	.8880-01	.9780-01	.9345	.5413-02	.3785-02	.5690	3.836	539.6
32	11.250	.36000	651.00	.7090-01	.9220-01	.1017	.9345	.5626-02	.3924-02	.5860	3.966	540.5
32	11.250	.37000	652.00	.7190-01	.9370-01	.1034	.9345	.5722-02	.3975-02	.5880	3.963	541.9
32	11.250	.38000	654.00	.7770-01	.1018	.1126	.9345	.6229-02	.4298-02	.6270	4.231	544.1
32	11.250	.39000	656.00	.8190-01	.1074	.1189	.9345	.6577-02	.4528-02	.6570	4.431	544.9
32	11.250	.39500	657.00	.8700-01	.1146	.1271	.9345	.7030-02	.4815-02	.6900	4.655	546.5
32	11.250	.40500	659.00	.1006	.1355	.1518	.9345	.8394-02	.5564-02	.7460	5.021	555.8
32	11.250	.41000	660.00	.1099	.1487	.1669	.9345	.9233-02	.6078-02	.8040	5.388	557.6
32	11.250	.41500	661.00	.1191	.1623	.1828	.9345	.1011-01	.6590-02	.8550	5.708	560.1
32	11.250	.42000	662.00	.1446	.2021	.2306	.9345	.1275-01	.7999-02	.9700	6.466	568.6

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
32	11.250	.42500	663.00	.1625	.2310	.2658	.9345	.1470-01	.8988-02	1.045	6.973	573.6
32	11.250	.43000	664.00	.1843	.2698	.3151	.9345	.1743-01	.1020-01	1.110	7.447	581.0
32	11.250	.44000	665.00	.2020	.2952	.3444	.9345	.1905-01	.1117-01	1.221	8.145	580.6
32	11.250	.45000	666.00	.1893	.2690	.3094	.9345	.1711-01	.1047-01	1.219	8.158	573.5
32	11.250	.45500	667.00	.1832	.2642	.3063	.9345	.1694-01	.1013-01	1.139	7.608	577.4
32	11.250	.46000	668.00	.1874	.2685	.3101	.9345	.1716-01	.1037-01	1.184	7.939	575.7
32	11.250	.47000	669.00	.1689	.2361	.2693	.9345	.1489-01	.9344-02	1.133	7.647	568.6
32	11.250	.48000	670.00	.1546	.2132	.2415	.9345	.1336-01	.8553-02	1.074	7.265	564.3
32	11.250	.49000	671.00	.1650	.2277	.2581	.9345	.1428-01	.9127-02	1.143	7.706	564.6
32	11.250	.50000	672.00	.1401	.1960	.2236	.9345	.1237-01	.7752-02	.9390	6.454	568.8
32	11.250	.70000	674.00	.7290-01	.9610-01	.1066	.9345	.5898-02	.4030-02	.5750	3.910	547.2
32	11.250	.85000	676.00	.1145	.1540	.1725	.9345	.9542-02	.6331-02	.8500	5.380	555.6
32	11.250	.86000	677.00	.1195	.1621	.1822	.9345	.1008-01	.6609-02	.8680	5.515	558.6
32	11.250	.87000	678.00	.1338	.1832	.2069	.9345	.1145-01	.7398-02	.9450	6.050	562.1
32	11.250	.88000	679.00	.1427	.1977	.2246	.9345	.1242-01	.7893-02	.9780	6.321	565.9
32	11.250	.90000	681.00	.1354	.1898	.2167	.9345	.1199-01	.7492-02	.9030	6.016	569.4
32	11.250	.91000	682.00	.1225	.1717	.1960	.9345	.1084-01	.6778-02	.8170	5.890	569.4
32	11.250	.92600	683.00	.2669	.4044	.4813	.9345	.2662-01	.1476-01	1.497	10.73	588.4
32	11.250	.95000	684.00	.3270-01	.4370-01	.4880-01	.9345	.2697-02	.1810-02	.2490	1.793	552.4
32	17.000	.33000	685.00	.5940-01	.7730-01	.8520-01	.9345	.4712-02	.3287-02	.4910	3.313	540.4
32	17.000	.34000	686.00	.6610-01	.8600-01	.9490-01	.9345	.5250-02	.3658-02	.5450	3.674	540.9
35	17.000	.35000	687.00	.7640-01	.1001	.1107	.9345	.6125-02	.4229-02	.6170	4.154	543.9
32	17.000	.35500	2102.0	.7830-01	.1006	.1103	.9345	.6091-02	.4324-02	.6790	4.460	538.3
32	17.000	.36000	688.00	.6680-01	.8670-01	.9560-01	.9345	.5287-02	.3696-02	.5550	3.743	539.7
32	17.000	.37000	689.00	.5720-01	.7360-01	.8080-01	.9345	.4467-02	.3165-02	.4910	3.319	534.8
32	17.000	.37500	690.00	.5800-01	.7450-01	.8170-01	.9345	.4518-02	.3208-02	.5000	3.392	534.0
35	17.000	.42500	2171.0	.1644	.2273	.2579	.9345	.1425-01	.9080-02	1.141	7.229	569.7
35	17.000	.43000	2176.0	.1665	.2339	.2675	.9345	.1477-01	.9196-02	1.110	7.118	574.7
30	17.000	.50000	691.00	.2057	.2856	.3247	.9345	.1794-01	.1137-01	1.401	9.328	566.1
30	17.000	.60000	692.00	.1017	.1301	.1424	.9345	.7869-02	.5621-02	.8890	5.775	531.3
30	17.000	.70000	693.00	.7970-01	.1025	.1125	.9345	.6216-02	.4403-02	.6820	4.652	534.6
30	17.000	.80000	694.00	.6100-01	.7830-01	.8590-01	.9345	.4748-02	.3369-02	.5240	3.313	534.0
30	17.000	.92600	696.00	.2164	.3191	.3741	.9345	.2067-01	.1196-01	1.280	9.203	582.3
35	20.980	.36000	2099.0	.7300-01	.9260-01	.1009	.9345	.5574-02	.4033-02	.6640	4.409	530.6
35	23.070	.35500	2094.0	.8900-01	.1154	.1270	.9345	.7013-02	.4918-02	.7500	4.944	542.9
35	23.070	.36000	2095.0	.8820-01	.1127	.1233	.9345	.6807-02	.4871-02	.7800	5.163	535.2
35	23.070	.36500	2096.0	.7550-01	.9520-01	.1036	.9345	.5723-02	.4169-02	.6990	4.648	527.6
34	23.070	.43500	2000.0	.1656	.2242	.2518	.9345	.1390-01	.9141-02	1.213	7.722	560.8
34	23.070	.70270	2002.0	.6270-01	.8050-01	.8840-01	.9345	.4877-02	.3459-02	.5400	3.871	537.3
34	23.070	.83500	2003.0	.7680-01	.9910-01	.1090	.9345	.6015-02	.4237-02	.6510	4.152	539.8
34	23.070	.90000	2004.0	.1220	.1654	.1860	.9345	.1026-01	.6736-02	.8900	5.939	561.3
35	23.070	.92600	2154.0	.1743	.2504	.2896	.9345	.1599-01	.9627-02	1.101	7.721	580.9
30	29.800	.70000-01	700.00	.4021	.5461	.5161	.9581	.2852-01	.2222-01	2.904	19.52	558.7

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT05)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
30	29.800	.10000+00	701.00	.2480	.3256	.3256	.9500	.1799-01	.1370-01	1.981	12.64	544.9
30	29.800	.15000	702.00	.1663	.2156	.2286	.9405	.1263-01	.9189-02	1.385	9.949	538.7
30	29.800	.20000	703.00	.9410-01	.1186	.1283	.9355	.7089-02	.5198-02	.8660	5.840	522.8
30	29.800	.30000	704.00	.7690-01	.9930-01	.1091	.9345	.6030-02	.4251-02	.6500	4.633	536.4
30	29.800	.35000	705.00	.1281	.1708	.1905	.9345	.1053-01	.7078-02	.9750	6.660	551.6
35	29.800	.35500	2090.0	.1136	.1522	.1701	.9345	.9394-02	.6275-02	.8610	5.634	558.1
35	29.800	.36500	2092.0	.1070	.1411	.1566	.9345	.8651-02	.5908-02	.8480	5.554	551.7
35	29.800	.37000	2093.0	.8620-01	.1115	.1226	.9345	.6773-02	.4758-02	.7280	4.806	542.2
32	29.800	.50000	707.00	.1313	.1807	.2045	.9345	.1131-01	.7262-02	.9160	6.220	563.7
32	29.800	.60000	708.00	.1076	.1411	.1561	.9345	.8636-02	.5950-02	.8640	5.515	544.6
32	29.800	.70000	709.00	.5130-01	.6690-01	.7390-01	.9345	.4089-02	.2837-02	.4190	2.675	542.3
32	29.800	.80000	710.00	.6090-01	.7910-01	.8710-01	.9345	.4819-02	.3367-02	.5050	3.159	539.8
35	31.430	.44000	2166.0	.2477	.3591	.4174	.9345	.2305-01	.1368-01	1.532	9.993	583.3
34	31.430	.47600	2005.0	.1530	.2087	.2353	.9345	.1299-01	.8446-02	1.097	7.226	563.5
34	31.430	.51100	2006.0	.1244	.1667	.1863	.9345	.1028-01	.6866-02	.9380	6.392	556.8
34	31.430	.54600	2007.0	.7800-01	.1056	.1186	.9345	.6549-02	.4306-02	.5710	3.978	560.9
34	31.430	.61600	2009.0	.1307	.1736	.1932	.9345	.1067-01	.7217-02	1.014	6.917	553.0
34	31.430	.65000	2010.0	.8920-01	.1145	.1256	.9345	.6935-02	.4921-02	.7700	5.379	537.0
34	31.430	.68600	2014.0	.6190-01	.7990-01	.8780-01	.9345	.4848-02	.3417-02	.5260	3.681	539.6
34	31.430	.72050	2015.0	.4030-01	.5180-01	.5690-01	.9345	.3139-02	.2224-02	.3460	2.581	537.7
34	31.430	.79040	2017.0	.6490-01	.8350-01	.9170-01	.9345	.5062-02	.3583-02	.5570	3.535	538.0
34	31.430	.86000	2019.0	.2000-01	.2570-01	.2810-01	.9345	.1552-02	.1105-02	.1740	1.130	535.8
34	31.430	.89520	2020.0	.1335	.1795	.2010	.9345	.1109-01	.7368-02	.9960	6.445	558.2
35	31.430	.92600	2153.0	.1442	.2024	.2313	.9345	.1277-01	.7964-02	.9630	6.929	574.4
34	33.750	.25000	2079.0	.6810-01	.8880-01	.9800-01	.9345	.5408-02	.3758-02	.5590	4.597	544.6
34	33.750	.30000	2080.0	.8890-01	.1156	.1274	.9345	.7033-02	.4908-02	.7380	4.866	543.1
34	33.750	.37500	2081.0	.8840-01	.1150	.1268	.9345	.7000-02	.4882-02	.7330	4.876	543.3
34	33.750	.40000	2082.0	.1592	.2249	.2579	.9345	.1424-01	.8787-02	1.043	6.829	574.8
34	33.750	.43000	2083.0	.2521	.3644	.4229	.9345	.2334-01	.1391-01	1.565	10.21	581.0
34	33.750	.45000	2084.0	.2071	.2879	.3275	.9345	.1808-01	.1143-01	1.413	9.276	569.9
34	33.750	.60000	2085.0	.9840-01	.1286	.1421	.9345	.7845-02	.5434-02	.8030	5.337	545.7
35	33.750	.65000	2086.0	.9690-01	.1240	.1357	.9345	.7496-02	.5353-02	.8530	5.747	536.0
35	33.750	.92600	2152.0	.1341	.1868	.2127	.9345	.1175-01	.7409-02	.9130	6.579	572.0
34	36.320	.25000	2066.0	.2041	.2855	.3257	.9345	.1798-01	.1126-01	1.370	8.983	571.9
34	36.320	.30000	2067.0	.8860-01	.1157	.1279	.9345	.7057-02	.4888-02	.7220	4.757	545.7
34	36.320	.35000	2069.0	.1043	.1367	.1513	.9345	.8351-02	.5759-02	.8430	5.597	547.1
34	36.320	.37500	2070.0	.9560-01	.1246	.1375	.9345	.7590-02	.5276-02	.7860	5.225	544.5
34	36.320	.40000	2071.0	.1635	.2266	.2574	.9345	.1421-01	.9023-02	1.124	7.379	569.0
34	36.320	.42000	2072.0	.2167	.3137	.3643	.9345	.2011-01	.1196-01	1.340	8.748	581.4
34	36.320	.42500	2073.0	.2244	.3264	.3799	.9345	.2097-01	.1239-01	1.374	8.965	582.5
34	36.320	.43500	2075.0	.2692	.3974	.4663	.9345	.2574-01	.1486-01	1.596	10.39	586.0
34	36.320	.60000	2077.0	.1043	.1358	.1498	.9345	.8271-02	.5760-02	.8620	5.783	543.9
34	36.320	.65000	2078.0	.9010-01	.1177	.1301	.9345	.7181-02	.4972-02	.7340	5.027	545.8

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
32	37.700	.50000-01	715.00	.4033	.5504	.4973	.9646	.2751-01	.2231-01	2.878	18.64	560.8
32	37.700	.70000-01	716.00	.3971	.5587	.5239	.9582	.2898-01	.2197-01	2.619	17.66	570.6
32	37.700	.10000+00	717.00	.2220	.2907	.2906	.9501	.1608-01	.1228-01	1.792	11.64	544.0
32	37.700	.15000	718.00	.1662	.2169	.2302	.9405	.1274-01	.9193-02	1.357	9.951	542.3
32	37.700	.20000	719.00	.8630-01	.1092	.1183	.9355	.6542-02	.4776-02	.7870	5.361	535.2
30	37.700	.30000	720.00	.7560-01	.9900-01	.1094	.9345	.6054-02	.4183-02	.6120	4.384	543.6
30	37.700	.35000	721.00	.9730-01	.1264	.1393	.9345	.7695-02	.5377-02	.8060	5.606	539.5
30	37.700	.37500	722.00	.1042	.1361	.1504	.9345	.8310-02	.5757-02	.8460	5.879	542.4
30	37.700	.50000	723.00	.1302	.1692	.1866	.9345	.1031-01	.7194-02	1.075	7.452	540.0
30	37.700	.60000	724.00	.1105	.1422	.1560	.9345	.8621-02	.6108-02	.9460	6.088	534.5
30	37.700	.70000	725.00	.6350-01	.8140-01	.8920-01	.9345	.4930-02	.3511-02	.5510	3.526	532.5
30	37.700	.80000	726.00	.6980-01	.8980-01	.9860-01	.9345	.5449-02	.3857-02	.5960	3.769	534.9
30	37.700	.87000	727.00	.1450	.1952	.2186	.9345	.1208-01	.8014-02	1.075	6.845	555.2
30	37.700	.92600	728.00	.1187	.1611	.1811	.9345	.1001-01	.6558-02	.8590	6.209	558.4
31	39.000	.10000-01	993.00	.4250	.6055	.5061	.9731	.2796-01	.2348-01	2.716	19.48	574.1
31	39.000	.25000-01	994.00	.4274	.5912	.5056	.9721	.2794-01	.2361-01	2.939	19.81	565.3
34	45.000	.25000	2036.0	.4270-01	.5460-01	.5980-01	.9345	.3300-02	.2356-02	.3740	3.044	534.7
34	45.000	.32500	2038.0	.7570-01	.9740-01	.1069	.9345	.5901-02	.4179-02	.6510	4.474	537.8
34	45.000	.35000	2039.0	.9180-01	.1185	.1302	.9345	.7186-02	.5069-02	.7820	5.291	539.2
34	45.000	.37500	2040.0	.1128	.1470	.1622	.9345	.8956-02	.6224-02	.9270	6.256	544.5
34	45.000	.40000	2041.0	.1535	.2074	.2327	.9345	.1284-01	.8472-02	1.131	7.572	560.0
34	45.000	.42000	2042.0	.1496	.2010	.2250	.9345	.1242-01	.8257-02	1.119	7.503	557.9
34	45.000	.42500	2043.0	.1519	.2044	.2289	.9345	.1264-01	.8387-02	1.133	7.594	558.4
34	45.000	.43000	2044.0	.1590	.2154	.2420	.9345	.1336-01	.8774-02	1.162	7.775	561.1
34	45.000	.43500	2045.0	.1597	.2169	.2440	.9345	.1347-01	.8817-02	1.160	7.759	561.9
34	45.000	.44000	2046.0	.1560	.2113	.2374	.9345	.1311-01	.8610-02	1.140	7.629	561.1
34	45.000	.45000	2047.0	.1516	.2051	.2304	.9345	.1272-01	.8365-02	1.111	7.480	560.7
34	45.000	.47000	2048.0	.1395	.1889	.2121	.9345	.1171-01	.7699-02	1.021	6.941	560.8
34	45.000	.55000	2049.0	.6220-01	.8040-01	.8840-01	.9345	.4882-02	.3434-02	.5260	3.624	540.3
34	45.000	.60000	2050.0	.9440-01	.1232	.1360	.9345	.7506-02	.5212-02	.7750	5.227	544.9
34	45.000	.65000	2051.0	.9430-01	.1225	.1351	.9345	.7456-02	.5206-02	.7840	5.229	543.0
34	45.000	.75000	2052.0	.7130-01	.9250-01	.1019	.9345	.5623-02	.3938-02	.5970	3.802	541.9
34	45.000	.80000	2053.0	.8800-01	.1142	.1258	.9345	.6945-02	.4855-02	.7330	4.615	542.5
34	45.000	.83000	2054.0	.1084	.1425	.1579	.9345	.8719-02	.5982-02	.8660	5.421	548.7
34	45.000	.84000	2055.0	.1403	.1887	.2112	.9345	.1166-01	.7743-02	1.047	6.523	558.3
34	45.000	.85000	2056.0	.1278	.1709	.1908	.9345	.1053-01	.7053-02	.9690	6.134	556.0
34	45.000	.86000	2057.0	.1364	.1807	.2010	.9345	.1109-01	.7527-02	1.063	6.899	552.2
34	45.000	.87000	2058.0	.1171	.1548	.1719	.9345	.9491-02	.6466-02	.9210	6.124	551.0
34	45.000	.88000	2059.0	.9990-01	.1319	.1463	.9345	.8078-02	.5517-02	.7910	5.257	550.2
34	45.000	.89000	2060.0	.1252	.1674	.1870	.9345	.1032-01	.6911-02	.9500	6.319	556.0
34	45.000	.90000	2061.0	.1012	.1333	.1479	.9345	.8166-02	.5584-02	.8020	5.368	549.8
34	45.000	.91000	2062.0	.5250-01	.6820-01	.7510-01	.9345	.4145-02	.2898-02	.4370	3.584	542.6
34	45.000	.92600	2063.0	.6530-01	.8800-01	.9860-01	.9345	.5445-02	.3603-02	.4840	3.397	559.2

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
34	45.000	.93500	2064.0	.6990-01	.9590-01	.1084	.9345	.5985-02	.3859-02	.4930	3.649	565.6
34	45.000	.94500	2065.0	.8900-01	.1160	.1280	.9345	.7066-02	.4911-02	.7320	4.865	544.5
30	180.00	.15000-01	2182.0	.4349	.6974	.5453	.9731	.3013-01	.2403-01	2.200	16.12	597.8
30	180.00	.20000-01	2183.0	.4906	.7292	.6003	.9721	.3317-01	.2711-01	2.855	21.28	584.1
30	180.00	.25000-01	2184.0	.4844	.6896	.5810	.9721	.3210-01	.2677-01	3.101	22.32	573.6
30	180.00	.30000-01	2185.0	.2212	.2986	.2589	.9719	.1431-01	.1222-01	1.625	11.72	556.4
30	180.00	.40000-01	737.00	.4503	.6218	.5463	.9681	.3019-01	.2488-01	3.108	20.10	564.5
30	180.00	.45000-01	738.00	.4601	.6341	.5644	.9663	.3118-01	.2542-01	3.193	20.96	563.8
30	180.00	.60000-01	739.00	.3949	.5326	.4937	.9613	.2728-01	.2182-01	2.911	19.47	556.0
30	180.00	.70000-01	740.00	.3436	.4601	.4360	.9582	.2409-01	.1898-01	2.583	17.41	553.3
30	180.00	.80000-01	741.00	.3009	.3991	.3858	.9553	.2132-01	.1663-01	2.331	16.93	549.2
30	180.00	.10000+00	742.00	.2548	.3331	.3330	.9500	.1840-01	.1408-01	2.064	13.82	542.8
30	180.00	.12500	743.00	.2019	.2624	.2710	.9447	.1498-01	.1115-01	1.667	12.16	539.9
30	180.00	.15000	744.00	.1651	.2126	.2250	.9405	.1243-01	.9123-02	1.407	9.840	535.2
30	180.00	.17500	745.00	.1090	.1392	.1495	.9375	.8262-02	.6025-02	.9590	7.270	530.2
30	180.00	.20000	746.00	.8310-01	.1053	.1141	.9355	.6302-02	.4592-02	.7520	5.439	525.6
30	180.00	.21500	747.00	.8020-01	.1035	.1135	.9349	.6274-02	.4429-02	.6760	4.710	536.7
30	180.00	.23000	748.00	.6180-01	.7960-01	.8730-01	.9346	.4825-02	.3415-02	.5270	3.922	535.0
30	180.00	.24000	749.00	.5070-01	.6540-01	.7180-01	.9345	.3969-02	.2801-02	.4300	3.259	536.0
30	180.00	.25000	750.00	.3020-01	.3860-01	.4220-01	.9345	.2333-02	.1670-02	.2650	2.166	530.5
30	180.00	.30000	751.00	.6150-01	.7930-01	.8710-01	.9345	.4813-02	.3400-02	.5230	3.449	535.7
30	180.00	.35000	752.00	.6270-01	.8080-01	.8870-01	.9345	.4903-02	.3467-02	.5340	3.398	535.2
30	180.00	.40000	753.00	.7630-01	.9900-01	.1090	.9345	.6021-02	.4218-02	.6360	4.109	538.5
30	180.00	.50000	754.00	.6810-01	.8790-01	.9660-01	.9345	.5339-02	.3762-02	.5750	3.782	536.5
30	180.00	.60000	755.00	.6570-01	.8560-01	.9450-01	.9345	.5220-02	.3628-02	.5370	3.454	541.3
30	180.00	.70000	756.00	.5370-01	.6960-01	.7660-01	.9345	.4233-02	.2967-02	.4480	2.971	538.4
30	180.00	.80000	757.00	.5340-01	.6900-01	.7590-01	.9345	.4195-02	.2949-02	.4480	2.823	537.4
30	180.00	.90000	758.00	.3770-01	.4890-01	.5390-01	.9345	.2978-02	.2081-02	.3120	2.025	539.5
30	235.00	.22000	759.00	.7070-01	.9120-01	.1001	.9347	.5529-02	.3908-02	.6000	4.490	535.9
30	235.00	.25000	760.00	.3810-01	.4860-01	.5310-01	.9345	.2937-02	.2105-02	.3360	2.652	530.0
30	235.00	.27000	761.00	.3000-01	.3820-01	.4170-01	.9345	.2305-02	.1659-02	.2670	2.008	528.3
30	235.00	.30000	762.00	.6790-01	.8730-01	.9580-01	.9345	.5291-02	.3752-02	.5820	3.523	534.2
30	235.00	.32000	763.00	.7450-01	.9620-01	.1058	.9345	.5843-02	.4114-02	.6280	3.734	536.8
30	235.00	.34000	764.00	.9330-01	.1218	.1345	.9345	.7431-02	.5155-02	.7600	4.521	541.9
30	235.00	.36000	765.00	.1067	.1411	.1567	.9345	.8661-02	.5895-02	.8330	5.008	548.0
30	235.00	.38000	766.00	.1232	.1649	.1843	.9345	.1018-01	.6808-02	.9280	5.621	553.1
32	247.00	.23000	768.00	.6520-01	.8510-01	.9390-01	.9346	.5196-02	.3604-02	.5310	3.959	542.5
32	247.00	.25000	769.00	.3470-01	.4490-01	.4940-01	.9345	.2734-02	.1919-02	.2910	2.271	538.4
32	247.00	.27000	770.00	.3360-01	.4440-01	.4930-01	.9345	.2728-02	.1858-02	.2630	1.919	548.2
32	247.00	.30000	772.00	.8430-01	.1121	.1248	.9345	.6906-02	.4663-02	.6490	3.958	550.7
32	247.00	.31000	773.00	.9190-01	.1225	.1366	.9345	.7557-02	.5082-02	.7010	4.239	551.9
32	247.00	.32000	774.00	.1113	.1510	.1698	.9345	.9391-02	.6155-02	.8070	4.825	558.7
32	247.00	.32500	775.00	.1225	.1682	.1902	.9345	.1052-01	.6774-02	.8600	5.143	562.9

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
32	247.00	.33000	776.00	.1393	.1938	.2206	.9345	.1220-01	.7704-02	.9440	5.651	567.3
32	247.00	.33500	777.00	.1526	.2159	.2476	.9345	.1370-01	.8443-02	.9940	5.936	572.1
32	247.00	.34000	778.00	.1533	.2162	.2477	.9345	.1370-01	.8478-02	1.005	6.000	571.3
32	247.00	.34500	779.00	.1609	.2256	.2578	.9345	.1426-01	.8899-02	1.069	6.408	569.7
32	247.00	.35000	780.00	.1489	.2042	.2307	.9345	.1276-01	.8239-02	1.051	6.338	562.3
32	247.00	.35500	781.00	.1545	.2145	.2438	.9345	.1349-01	.8548-02	1.055	6.366	566.5
30	247.00	.36000	782.00	.1393	.1866	.2085	.9345	.1152-01	.7695-02	1.046	6.355	553.5
30	247.00	.36500	783.00	.1311	.1748	.1950	.9345	.1078-01	.7241-02	.9970	6.044	551.8
30	247.00	.37000	784.00	.1258	.1668	.1856	.9345	.1026-01	.6948-02	.9730	5.937	549.4
30	247.00	.37500	785.00	.1140	.1505	.1671	.9345	.9234-02	.6298-02	.8950	5.511	547.4
30	247.00	.38000	786.00	.1054	.1387	.1537	.9345	.8490-02	.5827-02	.8390	5.186	545.5
30	247.00	.39000	787.00	.9620-01	.1253	.1383	.9345	.7642-02	.5318-02	.7900	4.909	540.9
30	247.00	.40000	788.00	.8050-01	.1040	.1143	.9345	.6315-02	.4449-02	.6800	4.273	536.5
31	247.00	.50000	789.00	.5450-01	.7030-01	.7720-01	.9345	.4266-02	.3011-02	.4620	2.979	536.3
31	247.00	.60000	790.00	.7400-01	.9760-01	.1084	.9345	.5987-02	.4086-02	.5810	3.815	547.5
31	247.00	.70000	791.00	.6240-01	.8470-01	.9530-01	.9345	.5264-02	.3450-02	.4520	3.175	558.7
31	247.00	.80000	792.00	.6030-01	.8020-01	.8930-01	.9345	.4934-02	.3329-02	.4630	2.901	550.9
31	247.00	.90000	793.00	.5880-01	.7960-01	.8940-01	.9345	.4940-02	.3248-02	.4290	2.748	557.9
35	247.00	.92600	2144.0	.5870-01	.8580-01	.1002	.9345	.5533-02	.3240-02	.3560	2.444	585.4
35	247.00	.93000	2149.0	.3930-01	.5870-01	.6920-01	.9345	.3822-02	.2173-02	.2290	1.622	589.8
35	250.57	.92600	2143.0	.6390-01	.9530-01	.1125	.9345	.6215-02	.3527-02	.3710	2.542	590.0
35	250.57	.93000	2148.0	.7560-01	.1175	.1419	.9345	.7839-02	.4174-02	.4070	2.799	597.9
35	250.57	.93700	2087.0	.3026	.4628	.5538	.9345	.3058-01	.1671-01	1.678	11.68	594.9
31	258.00	.27000	794.00	.3290-01	.4250-01	.4680-01	.9345	.2584-02	.1818-02	.2770	1.985	537.4
31	258.00	.29000	795.00	.7820-01	.1032	.1146	.9345	.6330-02	.4322-02	.6160	3.793	547.3
33	258.00	.32000	798.00	.1845	.2658	.3079	.9345	.1698-01	.1018-01	1.149	6.822	577.4
33	258.00	.34000	802.00	.2046	.2924	.3373	.9345	.1861-01	.1128-01	1.296	7.725	575.4
33	258.00	.34500	803.00	.1849	.2565	.2915	.9345	.1608-01	.1020-01	1.260	7.564	566.7
33	258.00	.35500	805.00	.1503	.2058	.2325	.9345	.1282-01	.8289-02	1.060	6.372	562.4
33	258.00	.36000	806.00	.1376	.1895	.2146	.9345	.1184-01	.7591-02	.9570	5.764	564.2
33	258.00	.36500	807.00	.1284	.1767	.2000	.9345	.1103-01	.7084-02	.8950	5.409	563.9
33	258.00	.37000	808.00	.1131	.1527	.1713	.9345	.9447-02	.6241-02	.8320	5.057	557.0
33	258.00	.37500	809.00	.9880-01	.1309	.1456	.9345	.8030-02	.5450-02	.7670	4.681	549.5
33	258.00	.38000	810.00	.7500-01	.9800-01	.1083	.9345	.5976-02	.4137-02	.6080	3.740	543.4
31	258.00	.40000	812.00	.3780-01	.4860-01	.5330-01	.9345	.2944-02	.2088-02	.3250	2.013	534.4
35	258.00	.93500	2151.0	.1515	.2247	.2643	.9345	.1460-01	.8365-02	.8920	6.171	588.6
31	270.00	.40000-01	985.00	.4056	.5564	.4904	.9681	.2710-01	.2241-01	2.853	18.41	562.5
31	270.00	.50000-01	986.00	.4278	.5869	.5295	.9646	.2926-01	.2363-01	3.006	19.28	562.6
31	270.00	.60000-01	987.00	.4141	.5590	.5182	.9613	.2863-01	.2288-01	3.043	19.93	556.8
31	270.00	.70000-01	988.00	.3655	.4933	.4668	.9581	.2579-01	.2019-01	2.687	17.97	556.7
31	270.00	.80000-01	989.00	.3053	.4096	.3955	.9552	.2185-01	.1687-01	2.283	16.12	554.4
31	270.00	.10000+00	990.00	.2518	.3299	.3299	.9500	.1823-01	.1391-01	2.028	13.25	544.0
31	270.00	.15000	991.00	.1500	.1935	.2049	.9405	.1132-01	.8286-02	1.269	9.368	536.6

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT05)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
31	270.00	.20000	992.00	.8640-01	.1097	.1191	.9355	.6579-02	.4771-02	.7720	5.273	527.9
31	270.00	.23000	813.00	.6690-01	.8700-01	.9590-01	.9346	.5299-02	.3699-02	.5530	4.033	540.3
31	270.00	.24000	814.00	.5350-01	.6980-01	.7700-01	.9345	.4255-02	.2958-02	.4380	3.555	541.6
31	270.00	.25000	815.00	.3420-01	.4410-01	.4840-01	.9345	.2676-02	.1887-02	.2890	2.292	536.6
31	270.00	.27000	816.00	.3240-01	.4170-01	.4590-01	.9345	.2534-02	.1788-02	.2750	1.962	536.3
31	270.00	.29000	817.00	.1758	.2405	.2714	.9345	.1500-01	.9712-02	1.245	7.680	561.6
31	270.00	.30000	818.00	.2335	.3241	.3683	.9345	.2035-01	.1290-01	1.593	9.643	566.3
31	270.00	.31000	819.00	.2491	.3483	.3973	.9345	.2195-01	.1376-01	1.668	9.998	568.6
31	270.00	.32000	820.00	.2738	.3868	.4435	.9345	.2450-01	.1513-01	1.786	10.66	571.7
31	270.00	.32500	821.00	.3479	.5073	.5913	.9345	.3267-01	.1922-01	2.110	12.51	580.0
31	270.00	.33000	822.00	.3538	.5266	.6206	.9345	.3429-01	.1955-01	2.054	12.18	584.7
31	270.00	.33500	823.00	.3309	.4789	.5560	.9345	.3072-01	.1828-01	2.040	12.18	578.2
31	270.00	.34500	825.00	.2513	.3428	.3865	.9345	.2135-01	.1388-01	1.793	10.76	560.6
31	270.00	.35000	826.00	.2823	.3931	.4475	.9345	.2473-01	.1560-01	1.909	11.42	567.4
31	270.00	.36000	828.00	.2572	.3717	.4313	.9345	.2383-01	.1421-01	1.590	9.438	577.9
31	270.00	.37000	830.00	.2140-01	.2720-01	.2980-01	.9345	.1646-02	.1181-02	.1890	1.154	530.0
31	270.00	.37500	831.00	.8810-01	.1139	.1253	.9345	.6922-02	.4870-02	.7420	4.545	537.4
31	270.00	.38000	832.00	.5720-01	.7320-01	.8010-01	.9345	.4426-02	.3161-02	.5000	3.069	531.7
31	270.00	.39000	833.00	.5390-01	.6920-01	.7590-01	.9345	.4191-02	.2977-02	.4650	2.882	533.8
31	270.00	.40000	834.00	.5500-01	.7060-01	.7740-01	.9345	.4275-02	.3037-02	.4740	2.948	533.8
31	270.00	.50000	835.00	.4530-01	.5880-01	.6480-01	.9345	.3583-02	.2502-02	.3750	2.377	540.0
31	270.00	.60000	836.00	.7960-01	.1054	.1171	.9345	.6470-02	.4401-02	.6220	4.137	548.5
31	270.00	.70000	837.00	.6700-01	.9030-01	.1012	.9345	.5593-02	.3704-02	.4960	3.473	556.0
31	270.00	.80000	838.00	.7810-01	.1029	.1141	.9345	.6306-02	.4316-02	.6180	3.840	546.6
31	270.00	.90000	839.00	.7560-01	.1031	.1162	.9345	.6420-02	.4178-02	.5410	3.433	560.4
35	270.00	.92600	2141.0	.3540	.5481	.6605	.9345	.3648-01	.1955-01	1.919	12.81	597.2
35	270.00	.93000	2146.0	.4113	.6558	.8040	.9345	.4440-01	.2272-01	2.119	14.56	602.1
35	270.00	.93500	2150.0	.2742	.3927	.4534	.9345	.2504-01	.1514-01	1.745	12.12	580.1
35	289.43	.92600	2140.0	.1888	.2802	.3296	.9345	.1820-01	.1043-01	1.112	7.618	588.7
35	289.43	.93000	2145.0	.3409	.5424	.6641	.9345	.3668-01	.1883-01	1.762	12.23	601.7
31	292.50	.23000	840.00	.6230-01	.8120-01	.8960-01	.9346	.4950-02	.3444-02	.5110	4.131	541.4
31	292.50	.25000	841.00	.3640-01	.4700-01	.5170-01	.9345	.2855-02	.2014-02	.3090	2.407	536.4
31	292.50	.27000	842.00	.2220-01	.2850-01	.3130-01	.9345	.1728-02	.1229-02	.1930	1.356	533.2
31	292.50	.35000	845.00	.1718	.2343	.2641	.9345	.1459-01	.9492-02	1.227	7.465	560.6
31	292.50	.37000	846.00	.1291	.1700	.1886	.9345	.1042-01	.7130-02	1.020	6.287	546.7
31	292.50	.40000	847.00	.7550-01	.9700-01	.1063	.9345	.5875-02	.4171-02	.6500	4.075	534.0
31	292.50	.45000	848.00	.5020-01	.6420-01	.7030-01	.9345	.3885-02	.2776-02	.4400	2.784	531.5
31	292.50	.50000	849.00	.5950-01	.7700-01	.8480-01	.9345	.4685-02	.3287-02	.4980	3.214	538.4
31	292.50	.60000	851.00	.1157	.1557	.1744	.9345	.9633-02	.6394-02	.8590	5.733	555.4
31	292.50	.65000	852.00	.1433	.1949	.2195	.9345	.1213-01	.7917-02	1.030	6.965	559.6
31	292.50	.70000	853.00	.1372	.1875	.2116	.9345	.1169-01	.7579-02	.9730	6.782	561.4
31	292.50	.75000	854.00	.9570-01	.1278	.1427	.9345	.7883-02	.5288-02	.7260	4.695	552.5
31	292.50	.80000	855.00	.9810-01	.1290	.1430	.9345	.7903-02	.5421-02	.7800	5.075	545.9

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
35	292.50	.82000	2129.0	.1018	.1332	.1472	.9345	.8132-02	.5625-02	.8310	5.089	547.6
35	292.50	.83000	2130.0	.9330-01	.1223	.1353	.9345	.7470-02	.5155-02	.7570	4.677	548.4
35	292.50	.85000	2132.0	.9270-01	.1220	.1352	.9345	.7469-02	.5119-02	.7410	4.596	550.6
35	292.50	.86000	2133.0	.9450-01	.1247	.1385	.9345	.7651-02	.5216-02	.7470	4.602	552.2
35	292.50	.87000	2134.0	.9490-01	.1261	.1405	.9345	.7757-02	.5239-02	.7350	4.548	555.0
35	292.50	.88000	2135.0	.1068	.1433	.1603	.9345	.8853-02	.5897-02	.8040	4.968	558.9
35	292.50	.89000	2136.0	.1350	.1830	.2056	.9345	.1136-01	.7457-02	.9890	6.114	562.7
31	292.50	.90000	856.00	.1468	.2017	.2282	.9345	.1261-01	.8109-02	1.026	6.603	563.2
35	292.50	.92600	2138.0	.1056	.1492	.1711	.9345	.9449-02	.5833-02	.6940	4.784	576.3
35	292.50	.93000	2139.0	.1679	.2474	.2899	.9345	.1601-01	.9275-02	1.004	7.062	587.1
35	301.50	.82000	2116.0	.8090-01	.1065	.1181	.9345	.6524-02	.4469-02	.6460	3.951	550.8
35	301.50	.83000	2117.0	.8150-01	.1075	.1192	.9345	.6585-02	.4502-02	.6480	3.941	551.3
35	301.50	.83500	2118.0	.8180-01	.1082	.1203	.9345	.6641-02	.4519-02	.6440	3.882	552.8
35	301.50	.84000	2119.0	.8430-01	.1114	.1238	.9345	.6836-02	.4656-02	.6650	4.040	552.5
35	301.50	.85000	2120.0	.8180-01	.1082	.1202	.9345	.6636-02	.4520-02	.6450	3.933	552.5
35	301.50	.86000	2021.0	.8470-01	.1119	.1243	.9345	.6866-02	.4680-02	.6690	4.102	552.3
35	301.50	.87000	2122.0	.7830-01	.1035	.1150	.9345	.6350-02	.4324-02	.6170	3.770	552.6
35	301.50	.88000	2123.0	.9690-01	.1307	.1466	.9345	.8094-02	.5354-02	.7200	4.408	560.8
35	301.50	.89000	2124.0	.1218	.1656	.1863	.9345	.1029-01	.6729-02	.8860	5.457	563.7
35	301.50	.90000	2125.0	.1159	.1571	.1766	.9345	.9753-02	.6400-02	.8480	5.269	562.9
35	301.50	.92600	2127.0	.1554	.2189	.2505	.9345	.1384-01	.8585-02	1.030	6.363	575.3
35	301.50	.93500	2128.0	.1562	.2176	.2478	.9345	.1368-01	.8627-02	1.063	7.076	572.1
35	305.40	.82000	2113.0	.7390-01	.9660-01	.1068	.9345	.5896-02	.4080-02	.6030	3.676	547.5
35	305.40	.83000	2114.0	.7570-01	.9960-01	.1104	.9345	.6099-02	.4181-02	.6050	3.683	550.5
35	305.40	.83500	2115.0	.8630-01	.1166	.1308	.9345	.7224-02	.4765-02	.6380	3.890	561.5
31	305.40	.84000	857.00	.8760-01	.1180	.1321	.9345	.7300-02	.4842-02	.6500	3.998	555.6
33	305.40	.85000	858.00	.9490-01	.1268	.1416	.9345	.7813-02	.5234-02	.7170	4.440	553.3
33	305.40	.86000	859.00	.8800-01	.1174	.1310	.9345	.7226-02	.4852-02	.6680	4.171	552.7
33	305.40	.87000	860.00	.9830-01	.1317	.1472	.9345	.8119-02	.5422-02	.7380	4.619	554.2
33	305.40	.88000	861.00	.1061	.1425	.1594	.9345	.8793-02	.5853-02	.7910	4.953	555.0
33	305.40	.89000	862.00	.1219	.1659	.1867	.9345	.1030-01	.6727-02	.8770	5.506	559.9
33	305.40	.90000	863.00	.1089	.1476	.1659	.9345	.9149-02	.6008-02	.7910	4.999	558.6
33	305.40	.91000	864.00	.1119	.1518	.1706	.9345	.9409-02	.6173-02	.8120	5.865	558.8
33	305.40	.92600	865.00	.1783	.2492	.2843	.9345	.1568-01	.9837-02	1.193	8.551	569.0
33	309.30	.80000	866.00	.5830-01	.7720-01	.8580-01	.9345	.4733-02	.3218-02	.4540	2.852	549.0
33	309.30	.81000	867.00	.6430-01	.8540-01	.9500-01	.9345	.5243-02	.3546-02	.4950	3.089	550.6
33	309.30	.82000	868.00	.5950-01	.7920-01	.8820-01	.9345	.4865-02	.3282-02	.4560	2.843	551.3
33	309.30	.83000	869.00	.6660-01	.8960-01	.1003	.9345	.5535-02	.3673-02	.4930	3.078	555.9
35	309.30	.8350^	2112.0	.7840-01	.1055	.1183	.9345	.6531-02	.4328-02	.5840	3.546	560.3
33	315.00	.50000-01	871.00	.4498	.6202	.5583	.9646	.3080-01	.2481-01	3.116	19.74	564.6
33	315.00	.60000-01	872.00	.3793	.5193	.4793	.9613	.2644-01	.2093-01	2.680	17.66	562.2
31	315.00	.70000-01	873.00	.3621	.4891	.4626	.9582	.2556-01	.2001-01	2.659	18.00	556.9
31	315.00	.10000+00	875.00	.2598	.3414	.3413	.9501	.1886-01	.1436-01	2.073	13.61	545.4

IH72. OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT05)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
31	315.00	.15000	876.00	.1469	.1901	.2014	.9405	.1113-01	.8115-02	1.231	9.049	538.1
31	315.00	.20000	877.00	.8710-01	.1109	.1205	.9355	.6655-02	.4813-02	.7730	5.259	529.1
31	315.00	.35000	878.00	.9300-01	.1215	.1342	.9345	.7416-02	.5141-02	.7570	4.716	542.5
31	315.00	.40000	879.00	.3000-01	.3290-01	.3400-01	.9345	.1878-02	.1655-02	.6300	4.540	309.0
31	315.00	.50000	880.00	.1329	.1813	.2043	.9345	.1129-01	.7345-02	.9500	6.476	560.5
31	315.00	.55000	881.00	.8850-01	.1180	.1317	.9345	.7275-02	.4889-02	.6730	4.474	552.0
31	315.00	.60000	882.00	.8080-01	.1060	.1173	.9345	.6481-02	.4466-02	.6490	4.368	544.4
31	315.00	.65000	883.00	.6730-01	.8810-01	.9750-01	.9345	.5386-02	.3717-02	.5420	3.704	544.0
31	315.00	.70000	884.00	.6890-01	.9090-01	.1009	.9345	.5573-02	.3809-02	.5430	3.862	547.1
31	315.00	.75000	885.00	.4530-01	.5900-01	.6520-01	.9345	.3601-02	.2501-02	.3700	2.338	541.8
31	315.00	.80000	886.00	.5590-01	.7300-01	.8060-01	.9345	.4454-02	.3087-02	.4540	2.862	542.6
31	315.00	.84000	887.00	.8140-01	.1097	.1229	.9345	.6792-02	.4498-02	.6020	3.765	556.0
33	315.00	.85000	888.00	.7900-01	.1073	.1208	.9345	.6662-02	.4359-02	.5700	3.590	559.5
33	315.00	.87000	890.00	.9100-01	.1222	.1368	.9345	.7547-02	.5018-02	.6770	4.286	555.3
33	315.00	.88000	891.00	.8900-01	.1202	.1348	.9345	.7437-02	.4911-02	.6540	4.158	557.1
33	315.00	.89000	892.00	.7970-01	.1081	.1216	.9345	.6707-02	.4398-02	.5780	3.734	558.9
33	315.00	.90000	893.00	.4800-01	.6550-01	.7390-01	.9345	.4074-02	.2648-02	.3420	2.235	561.1
33	315.00	.91000	894.00	.3630-01	.4880-01	.5460-01	.9345	.3012-02	.2001-02	.2690	1.956	555.6
33	315.00	.92600	895.00	.7340-01	.1035	.1186	.9345	.6544-02	.4047-02	.4800	3.443	571.8
33	322.30	.42000	897.00	.1403	.1906	.2144	.9345	.1183-01	.7742-02	1.013	6.472	559.4
33	322.30	.43500	898.00	.1635	.2276	.2591	.9345	.1429-01	.9017-02	1.104	6.830	567.8
33	322.30	.45000	899.00	.1624	.2288	.2621	.9345	.1446-01	.8956-02	1.064	6.878	571.4
33	322.30	.50000	900.00	.1476	.2026	.2291	.9345	.1264-01	.8144-02	1.035	6.840	563.1
33	322.30	.60000	901.00	.7680-01	.1014	.1126	.9345	.6214-02	.4235-02	.6010	3.988	548.3
35	324.45	.40500	2109.0	.1304	.1753	.1962	.9345	.1083-01	.7203-02	.9790	6.129	559.4
35	324.45	.41000	2110.0	.1410	.1915	.2155	.9345	.1190-01	.7786-02	1.025	6.408	563.6
35	324.45	.92600	2164.0	.1131	.1578	.1799	.9345	.9933-02	.6245-02	.7660	5.373	572.7
35	326.85	.40000	2107.0	.1121	.1473	.1632	.9345	.9014-02	.6191-02	.9010	5.666	549.9
35	326.85	.40500	2108.0	.1319	.1766	.1973	.9345	.1090-01	.7284-02	1.001	6.270	558.0
34	326.85	.44000	2021.0	.1689	.2357	.2687	.9345	.1483-01	.9325-02	1.141	7.165	571.1
34	326.85	.54600	2024.0	.3950-01	.5190-01	.5740-01	.9345	.3169-02	.2183-02	.3180	2.133	547.6
34	326.85	.58100	2025.0	.8620-01	.1135	.1259	.9345	.6951-02	.4758-02	.6850	4.786	549.5
34	326.85	.61600	2026.0	.8200-01	.1078	.1194	.9345	.6589-02	.4529-02	.6580	4.571	548.2
34	326.85	.65200	2027.0	.8480-01	.1115	.1235	.9345	.6815-02	.4683-02	.6800	4.725	548.2
34	326.85	.68600	2028.0	.7920-01	.1036	.1145	.9345	.6319-02	.4374-02	.6450	4.532	545.9
34	326.85	.72260	2029.0	.5010-01	.6480-01	.7130-01	.9345	.3933-02	.2766-02	.4240	2.963	540.4
34	326.85	.75790	2030.0	.4880-01	.6290-01	.6910-01	.9345	.3815-02	.2695-02	.4170	2.677	538.7
34	326.85	.79310	2031.0	.6230-01	.8090-01	.8910-01	.9345	.4918-02	.3440-02	.5200	3.264	542.4
34	326.85	.82830	2032.0	.7610-01	.9940-01	.1099	.9345	.6066-02	.4201-02	.6210	3.925	545.7
34	326.85	.86350	2033.0	.7920-01	.1045	.1159	.9345	.6399-02	.4370-02	.6260	3.918	550.2
34	326.85	.90000	2034.0	.9310-01	.1255	.1407	.9345	.7764-02	.5137-02	.6900	4.258	559.2
35	326.85	.92600	2163.0	.1223	.1709	.1950	.9345	.1077-01	.6754-02	.8250	5.789	573.1
34	326.85	.93390	2035.0	.1474	.2100	.2419	.9345	.1335-01	.8138-02	.9470	6.248	577.1

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT05)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
35	330.20	.40000	2104.0	.1171	.1543	.1711	.9345	.9451-02	.6466-02	.9320	5.864	551.1
35	330.20	.40500	2105.0	.1335	.1771	.1970	.9345	.1088-01	.7374-02	1.042	6.542	554.0
35	330.20	.41000	2106.0	.1440	.1918	.2138	.9345	.1181-01	.7955-02	1.110	6.947	555.7
33	330.20	.42000	905.00	.1425	.1925	.2160	.9345	.1191-01	.7858-02	1.044	6.694	557.4
33	330.20	.43500	906.00	.1510	.2083	.2362	.9345	.1303-01	.8327-02	1.043	6.706	565.0
33	330.20	.45000	907.00	.1856	.2641	.3040	.9345	.1677-01	.1024-01	1.189	7.654	574.1
33	330.20	.50000	908.00	.1268	.1726	.1943	.9345	.1072-01	.6995-02	.9100	6.468	560.1
33	330.20	.60000	909.00	.8560-01	.1128	.1252	.9345	.6907-02	.4721-02	.6740	4.412	547.4
33	330.20	.70000	910.00	.6650-01	.8740-01	.9680-01	.9345	.5342-02	.3671-02	.5310	3.579	545.7
33	330.20	.80000	911.00	.3820-01	.4970-01	.5490-01	.9345	.3028-02	.2105-02	.3120	2.008	541.8
33	330.20	.87000	912.00	.9800-02	.1270-01	.1400-01	.9345	.7708-03	.5423-03	.8300-01	.5310	537.7
35	330.20	.92600	2162.0	.1509	.2124	.2431	.9345	.1342-01	.8334-02	1.001	6.993	575.2
35	334.98	.92600	2161.0	.1757	.2528	.2925	.9345	.1616-01	.9706-02	1.107	7.685	581.3
33	334.98	.93500	913.00	.2194	.3348	.3999	.9345	.2206-01	.1210-01	1.212	8.623	590.1
33	334.98	.94500	914.00	.5520-01	.7200-01	.7950-01	.9345	.4386-02	.3047-02	.4510	3.256	542.2
33	337.50	.40000-01	915.00	.4276	.5912	.5191	.9682	.2863-01	.2359-01	2.943	18.48	565.5
33	337.50	.50000-01	916.00	.4328	.5978	.5378	.9646	.2966-01	.2387-01	2.986	19.08	565.2
33	337.50	.70000-01	918.00	.3365	.4547	.4299	.9582	.2372-01	.1856-01	2.465	17.05	557.4
33	337.50	.80000-01	919.00	.3080	.4132	.3988	.9553	.2200-01	.1699-01	2.304	15.66	554.7
33	337.50	.10000+00	920.00	.2419	.3177	.3176	.9501	.1752-01	.1334-01	1.930	12.90	545.6
33	337.50	.15000	921.00	.1393	.1804	.1911	.9405	.1054-01	.7687-02	1.165	8.479	538.7
33	337.50	.20000	922.00	.9170-01	.1170	.1271	.9355	.7011-02	.5061-02	.8090	5.435	530.3
33	337.50	.42000	923.00	.1352	.1855	.2097	.9345	.1157-01	.7461-02	.9500	6.149	562.9
35	337.50	.42500	2167.0	.1296	.1729	.1929	.9345	.1065-01	.7160-02	.9940	6.381	556.4
33	337.50	.43500	924.00	.1213	.1626	.1817	.9345	.1002-01	.6691-02	.9100	5.932	554.2
33	337.50	.85000	926.00	.9340-01	.1247	.1392	.9345	.7678-02	.5153-02	.7080	4.568	552.8
33	337.50	.86000	927.00	.8630-01	.1108	.1215	.9345	.6701-02	.4763-02	.7450	4.861	533.9
33	337.50	.87000	928.00	.1088	.1469	.1649	.9345	.9094-02	.6000-02	.7970	5.158	557.4
33	337.50	.88000	929.00	.7240-01	.9320-01	.1023	.9345	.5645-02	.3995-02	.6180	4.067	535.6
33	337.50	.90000	931.00	.1419	.1991	.2275	.9345	.1255-01	.7825-02	.9400	6.260	570.2
33	337.50	.91000	932.00	.1275	.1782	.2034	.9345	.1122-01	.7032-02	.8520	6.165	569.1
31	337.50	.92600	933.00	.1866	.2709	.3151	.9345	.1741-01	.1031-01	1.142	8.197	579.0
31	343.12	.41500	934.00	.1175	.1564	.1742	.9345	.9625-02	.6495-02	.9020	5.840	550.9
31	343.12	.42000	935.00	.1234	.1661	.1860	.9345	.1028-01	.6816-02	.9140	5.954	555.7
31	343.12	.42500	936.00	.1653	.2302	.2621	.9345	.1448-01	.9135-02	1.118	7.261	567.4
31	343.12	.44500	939.00	.1974	.2860	.3322	.9345	.1835-01	.1090-01	1.214	7.935	578.5
31	343.12	.45000	940.00	.1889	.2698	.3111	.9345	.1719-01	.1043-01	1.200	7.856	574.8
31	343.12	.50000	941.00	.1401	.1919	.2168	.9345	.1198-01	.7740-02	.9890	6.653	562.1
31	343.12	.60000	942.00	.1189	.1585	.1768	.9345	.9769-02	.6570-02	.9060	5.830	551.8
31	343.12	.80000	944.00	.8290-01	.1087	.1203	.9345	.6646-02	.4578-02	.6650	4.340	544.6
35	345.56	.42500	2168.0	.1667	.2311	.2625	.9345	.1450-01	.9208-02	1.149	7.324	570.5
35	345.56	.92600	2160.0	.2238	.3229	.3742	.9345	.2067-01	.1236-01	1.401	9.720	582.0
31	348.00	.35000	945.00	.6370-01	.8220-01	.9040-01	.9345	.4992-02	.3517-02	.5380	3.425	536.9

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT05)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
31	348.00	.36000	946.00	.7190-01	.9310-01	.1024	.9345	.5658-02	.3971-02	.6020	3.840	538.3
31	348.00	.37000	947.00	.9800-01	.1283	.1419	.9345	.7838-02	.5416-02	.7920	5.055	543.6
33	348.00	.37500	948.00	.9800-01	.1287	.1426	.9345	.7864-02	.5407-02	.7830	4.992	545.5
33	348.00	.38000	949.00	.8940-01	.1170	.1294	.9345	.7137-02	.4931-02	.7210	4.645	544.0
33	348.00	.38500	950.00	.7960-01	.1039	.1148	.9345	.6332-02	.4389-02	.6460	4.177	543.0
33	348.00	.39000	951.00	.7740-01	.1012	.1118	.9345	.6170-02	.4267-02	.6260	4.065	543.6
33	348.00	.39500	952.00	.8140-01	.1067	.1181	.9345	.6517-02	.4489-02	.6520	4.175	544.9
33	348.00	.40000	953.00	.8390-01	.1104	.1224	.9345	.6750-02	.4629-02	.6660	4.334	546.3
33	348.00	.41000	955.00	.1100	.1476	.1651	.9345	.9107-02	.6067-02	.8220	5.340	554.8
33	348.00	.42000	957.00	.1398	.1923	.2176	.9345	.1200-01	.7710-02	.9750	6.343	563.8
33	348.00	.42500	958.00	.1363	.1869	.2112	.9345	.1165-01	.7516-02	.9580	6.234	562.8
33	348.00	.43000	959.00	.1698	.2448	.2836	.9345	.1565-01	.9364-02	1.054	6.793	577.6
33	348.00	.44000	960.00	.2169	.3118	.3607	.9345	.1990-01	.1196-01	1.357	8.769	576.9
33	348.00	.44500	961.00	.1967	.2813	.3245	.9345	.1790-01	.1085-01	1.246	8.059	575.4
33	348.00	.47000	965.00	.1527	.2129	.2424	.9345	.1337-01	.8425-02	1.029	6.784	568.1
33	348.00	.85000	968.00	.1178	.1590	.1784	.9345	.9842-02	.6497-02	.8640	5.578	557.2
33	348.00	.86000	969.00	.1134	.1550	.1749	.9345	.9650-02	.6254-02	.8030	5.186	561.8
34	348.00	.89000	972.00	.1651	.2309	.2635	.9345	.1454-01	.9115-02	1.109	7.274	571.8
34	348.00	.90000	973.00	.1544	.2191	.2518	.9345	.1390-01	.8524-02	1.001	6.713	576.0
34	348.00	.91000	974.00	.1539	.2199	.2537	.9345	.1400-01	.8497-02	.9810	7.048	578.0
34	348.00	.92600	975.00	.2612	.3956	.4707	.9345	.2598-01	.1442-01	1.471	10.43	591.4
35	352.20	.93700	2089.0	.4510-01	.6820-01	.8120-01	.9345	.4484-02	.2490-02	.2550	1.743	592.9
35	354.00	.42500	2169.0	.2940-01	.3810-01	.4200-01	.9345	.2318-02	.1626-02	.2480	1.601	542.9
35	354.00	.43000	2174.0	.1589	.2236	.2558	.9345	.1413-01	.8778-02	1.056	6.714	575.0
35	354.00	.43500	2177.0	.2081	.3059	.3582	.9345	.1978-01	.1149-01	1.249	7.893	586.6
35	354.00	.44000	2179.0	.2095	.3162	.3755	.9345	.2074-01	.1157-01	1.193	7.517	592.3
35	355.16	.92600	2158.0	.3143	.4967	.6057	.9345	.3345-01	.1736-01	1.644	11.48	600.6

PARAMETRIC DATA

ALPHA = -5.000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
15	-4.980	-8.900	4.020	72.50	743.0	175.6	.4650	5.260	2610.	.2222-03	.1414-06	4.102
16	-4.980	-8.900	4.020	72.40	743.0	175.5	.4640	5.251	2609.	.2219-03	.1413-06	4.099
17	-5.030	-9.000	4.020	72.50	738.0	174.4	.4650	5.260	2602.	.2237-03	.1404-06	4.143
55	-5.000	-8.900	4.020	72.20	748.0	176.7	.4630	5.241	2618.	.2200-03	.1422-06	4.050
57	-5.000	-8.900	4.020	72.50	752.0	177.7	.4650	5.258	2626.	.2195-03	.1431-06	4.028

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
15	.5102-01	.1136-01
16	.5097-01	.1137-01
17	.5098-01	.1131-01
55	.5097-01	.1143-01
57	.5110-01	.1145-01

TEST DATA

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
16	.00000	.25000-01	2187.0	.5018	.6310	.5706	.9706	.2908-01	.2558-01	4.639	32.52	561.3
16	.00000	.30000-01	2188.0	.4881	.6129	.5550	.9704	.2829-01	.2488-01	4.536	32.02	560.3
15	.00000	.40000-01	600.00	.4546	.5596	.5197	.9666	.2652-01	.2319-01	4.592	29.55	545.2
15	.00000	.50000-01	601.00	.3899	.4812	.4535	.9630	.2314-01	.1989-01	3.895	25.11	547.4
15	.00000	.70000-01	603.00	.3234	.3971	.3862	.9562	.1970-01	.1650-01	3.303	22.58	543.1
15	.00000	.80000-01	604.00	.3027	.3711	.3662	.9530	.1868-01	.1544-01	3.110	20.29	541.8
15	.00000	.15000	606.00	.1541	.1865	.1992	.9347	.1017-01	.7863-02	1.684	12.36	529.0
15	.00000	.20000	607.00	.9100-01	.1098	.1217	.9264	.6208-02	.4643-02	1.008	6.644	526.2
15	.00000	.21000	608.00	.7840-01	.9590-01	.1078	.9252	.5500-02	.4000-02	.8140	5.648	539.6
15	.00000	.22000	609.00	.6870-01	.8410-01	.9510-01	.9243	.4852-02	.3504-02	.7100	5.300	540.6
15	.00000	.30000	610.00	.6110-01	.7490-01	.8550-01	.9228	.4363-02	.3115-02	.6250	4.288	542.6
15	.00000	.35000	611.00	.5570-01	.6810-01	.7740-01	.9228	.3951-02	.2840-02	.5790	3.875	539.2
15	.00000	.36000	612.00	.5660-01	.6930-01	.7890-01	.9228	.4025-02	.2887-02	.5860	3.951	540.3
15	.00000	.37000	613.00	.9460-01	.1166	.1335	.9228	.6812-02	.4829-02	.9520	6.398	546.2

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT10)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
15	.00000	.37500	614.00	.9420-01	.1165	.1337	.9228	.6822-02	.4808-02	.9340	6.274	548.9
17	.00000	.38000	615.00	.9050-01	.1115	.1276	.9228	.6507-02	.4614-02	.9040	6.086	542.4
17	.00000	.38500	616.00	.8370-01	.1032	.1181	.9228	.6021-02	.4268-02	.8350	5.626	542.5
17	.00000	.39500	618.00	.8870-01	.1105	.1275	.9228	.6501-02	.4524-02	.8470	5.701	550.9
17	.00000	.40000	619.00	.9010-01	.1125	.1300	.9228	.6629-02	.4594-02	.8530	5.699	552.6
17	.00000	.40500	620.00	.9920-01	.1230	.1416	.9228	.7216-02	.5055-02	.9620	6.459	548.0
17	.00000	.41000	621.00	.1425	.1776	.2051	.9228	.1045-01	.7265-02	1.356	9.095	551.5
17	.00000	.41500	622.00	.1700	.2122	.2453	.9228	.1250-01	.8668-02	1.610	10.76	552.5
17	.00000	.43000	625.00	.2123	.2685	.3135	.9228	.1598-01	.1082-01	1.910	12.74	561.7
17	.00000	.44000	626.00	.2153	.2771	.3283	.9228	.1674-01	.1097-01	1.817	12.05	572.7
17	.00000	.44500	627.00	.2215	.2853	.3382	.9228	.1724-01	.1129-01	1.864	12.48	573.2
17	.00000	.45000	628.00	.2036	.2587	.3032	.9228	.1546-01	.1038-01	1.800	12.10	564.8
17	.00000	.45500	629.00	.1819	.2287	.2659	.9228	.1355-01	.9272-02	1.672	11.45	557.9
15	.00000	.46000	630.00	.1571	.1999	.2348	.9228	.1198-01	.8014-02	1.390	9.232	569.8
15	.00000	.47000	631.00	.1214	.1541	.1806	.9228	.9213-02	.6194-02	1.085	7.212	568.1
15	.00000	.48000	632.00	.7790-01	.9880-01	.1156	.9228	.5899-02	.3977-02	.7000	4.687	567.1
15	.00000	.49000	633.00	.7060-01	.8920-01	.1042	.9228	.5316-02	.3603-02	.6420	4.338	565.2
15	.00000	.50000	634.00	.9960-01	.1270	.1492	.9228	.7614-02	.5084-02	.8780	6.068	570.6
15	.00000	.55000	635.00	.7770-01	.9830-01	.1148	.9228	.5857-02	.3966-02	.7050	4.638	565.5
15	.00000	.60000	636.00	.8230-01	.1025	.1183	.9228	.6037-02	.4202-02	.7930	5.093	554.5
15	.00000	.65000	637.00	.1117	.1392	.1607	.9228	.8197-02	.5700-02	1.073	6.914	554.9
15	.00000	.70000	638.00	.9090-01	.1136	.1314	.9228	.6705-02	.4636-02	.8620	5.869	557.3
15	.00000	.75000	639.00	.8610-01	.1071	.1234	.9228	.6299-02	.4392-02	.8320	5.349	553.7
15	.00000	.80000	640.00	.7950-01	.9820-01	.1126	.9228	.5743-02	.4057-02	.7930	4.968	547.8
15	.00000	.85000	641.00	.7310-01	.9110-01	.1051	.9228	.5362-02	.3731-02	.7040	4.430	554.6
15	.00000	.87000	643.00	.1674	.2124	.2489	.9228	.1270-01	.8540-02	1.496	9.548	568.0
15	.00000	.88000	644.00	.2220	.2857	.3386	.9228	.1727-01	.1133-01	1.887	12.10	576.6
17	.00000	.95000	649.00	.7110-01	.8770-01	.1004	.9228	.5115-02	.3626-02	.7090	5.186	542.6
57	5.6250	.42500	2170.0	.1473	.1919	.2300	.9225	.1175-01	.7529-02	1.220	7.768	590.0
57	5.6250	.43000	2175.0	.2006	.2684	.3297	.9225	.1685-01	.1025-01	1.524	9.637	603.4
57	5.6250	.44000	2180.0	.2310	.3136	.3902	.9225	.1994-01	.1181-01	1.686	10.63	609.3
17	11.250	.35000	650.00	.5630-01	.6890-01	.7870-01	.9223	.4012-02	.2872-02	.5800	3.916	536.4
17	11.250	.36000	651.00	.9220-01	.1137	.1306	.9223	.6655-02	.4701-02	.9180	6.199	543.0
17	11.250	.37000	652.00	.9270-01	.1145	.1316	.9223	.6710-02	.4723-02	.9150	6.156	544.5
17	11.250	.38000	654.00	.8920-01	.1100	.1264	.9223	.6442-02	.4545-02	.8850	5.975	543.5
17	11.250	.39000	656.00	.1087	.1349	.1556	.9223	.7933-02	.5539-02	1.052	7.089	548.2
17	11.250	.39500	657.00	.1097	.1367	.1582	.9223	.8064-02	.5592-02	1.046	7.038	551.1
17	11.250	.40500	659.00	.1012	.1275	.1490	.9223	.7595-02	.5160-02	.9230	6.200	559.4
17	11.250	.41000	660.00	.1071	.1354	.1586	.9223	.8082-02	.5458-02	.9640	6.448	561.7
17	11.250	.41500	661.00	.1242	.1574	.1848	.9223	.9422-02	.6330-02	1.106	7.371	563.5
17	11.250	.42000	662.00	.1577	.2025	.2403	.9223	.1225-01	.8039-02	1.341	8.933	571.4
17	11.250	.42500	663.00	.1688	.2191	.2622	.9223	.1337-01	.8606-02	1.385	9.225	577.3
17	11.250	.43000	664.00	.2063	.2726	.3316	.9223	.1690-01	.1052-01	1.596	10.68	586.5

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT10)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
17	11.250	.44000	665.00	.2594	.3443	.4203	.9223	.2143-01	.1323-01	1.981	13.16	588.4
17	11.250	.45000	666.00	.1643	.2105	.2493	.9223	.1271-01	.8375-02	1.408	9.441	570.1
17	11.250	.45500	667.00	.1479	.1887	.2226	.9223	.1135-01	.7540-02	1.289	8.654	567.3
17	11.250	.46000	668.00	.1363	.1731	.2035	.9223	.1037-01	.6948-02	1.207	8.135	564.6
17	11.250	.47000	669.00	.1090	.1378	.1615	.9223	.8230-02	.5556-02	.9800	6.641	561.8
17	11.250	.48000	670.00	.1180	.1493	.1750	.9223	.8923-02	.6014-02	1.058	7.164	562.3
17	11.250	.49000	671.00	.1755	.2249	.2663	.9223	.1358-01	.8946-02	1.504	10.11	570.1
17	11.250	.50000	672.00	.1679	.2158	.2562	.9223	.1306-01	.8558-02	1.423	9.771	571.9
17	11.250	.70000	674.00	.8120-01	.1010	.1167	.9223	.5947-02	.4139-02	.7800	5.302	549.7
17	11.250	.85000	676.00	.8610-01	.1071	.1238	.9223	.6310-02	.4390-02	.8280	5.253	549.7
17	11.250	.86000	677.00	.1069	.1340	.1557	.9223	.7939-02	.5452-02	.9980	6.352	555.2
17	11.250	.87000	678.00	.1197	.1511	.1766	.9223	.9005-02	.6104-02	1.086	6.958	560.3
17	11.250	.88000	679.00	.1689	.2156	.2547	.9223	.1298-01	.8608-02	1.465	9.456	568.1
17	11.250	.90000	681.00	.1378	.1791	.2148	.9223	.1095-01	.7024-02	1.123	7.455	578.3
17	11.250	.91000	682.00	.8700-01	.1139	.1375	.9223	.7010-02	.4434-02	.6920	4.958	582.2
17	11.250	.92600	683.00	.9610-01	.1332	.1695	.9223	.8638-02	.4898-02	.6490	4.610	605.8
17	11.250	.95000	684.00	.6160-01	.7650-01	.8840-01	.9223	.4506-02	.3140-02	.5940	4.284	549.1
17	17.000	.33000	685.00	.5310-01	.6520-01	.7470-01	.9222	.3807-02	.2708-02	.5390	3.639	539.1
17	17.000	.34000	686.00	.5320-01	.6530-01	.7480-01	.9222	.3814-02	.2713-02	.5400	3.642	539.2
17	17.000	.35000	687.00	.6980-01	.8610-01	.9890-01	.9222	.5041-02	.3560-02	.6970	4.693	542.5
57	17.000	.35500	2102.0	.8250-01	.1028	.1191	.9222	.6085-02	.4213-02	.8020	5.208	561.7
17	17.000	.36000	688.00	.9630-01	.1187	.1363	.9222	.6950-02	.4907-02	.9590	6.460	542.7
17	17.000	.37000	689.00	.8520-01	.1042	.1190	.9222	.6065-02	.4345-02	.8800	5.951	535.6
17	17.000	.37500	690.00	.8340-01	.1015	.1155	.9222	.5889-02	.4249-02	.8770	5.958	531.8
57	17.000	.42500	2171.0	.1858	.2445	.2966	.9222	.1515-01	.9495-02	1.488	9.314	595.3
57	17.000	.43000	2176.0	.1821	.2443	.3017	.9222	.1542-01	.9303-02	1.374	8.683	604.4
15	17.000	.50000	691.00	.2109	.2778	.3373	.9222	.1721-01	.1076-01	1.662	10.94	588.8
15	17.000	.60000	692.00	.1343	.1650	.1892	.9222	.9654-02	.6850-02	1.365	8.812	544.0
15	17.000	.70000	693.00	.6770-01	.8390-01	.9680-01	.9222	.4941-02	.3453-02	.6640	4.491	551.1
15	17.000	.80000	694.00	.5480-01	.6730-01	.7710-01	.9222	.3933-02	.2794-02	.5580	3.514	543.4
15	17.000	.92600	696.00	.1096	.1530	.1963	.9222	.1002-01	.5594-02	.7330	5.191	612.2
57	20.980	.35500	2098.0	.4070-01	.4380-01	.4570-01	.9221	.2334-02	.2081-02	1.125	8.989	211.7
57	20.980	.36000	2099.0	.8040-01	.9850-01	.1128	.9221	.5762-02	.4107-02	.8380	5.514	548.0
57	20.980	.36500	2100.0	.8240-01	.1002	.1139	.9221	.5818-02	.4210-02	.8930	5.899	539.9
57	23.070	.35500	2094.0	.5260-01	.6570-01	.7630-01	.9220	.3897-02	.2687-02	.5070	3.311	563.3
57	23.070	.36000	2095.0	.5740-01	.7050-01	.8090-01	.9220	.4136-02	.2931-02	.5900	3.877	550.7
57	23.070	.36500	2096.0	.7080-01	.8610-01	.9790-01	.9220	.5002-02	.3619-02	.7670	5.066	540.1
57	23.070	.92600	2154.0	.1033	.1364	.1663	.9220	.8495-02	.5276-02	.8160	5.676	597.3
15	29.800	.70000-01	700.00	.3347	.4129	.4168	.9480	.2127-01	.1708-01	3.353	22.67	546.9
15	29.800	.10000+00	701.00	.2564	.3122	.3269	.9397	.1668-01	.1308-01	2.719	17.43	535.4
15	29.800	.15000	702.00	.1215	.1475	.1617	.9294	.8250-02	.6200-02	1.310	9.438	532.0
15	29.800	.20000	703.00	.5170-01	.6230-01	.6990-01	.9235	.3568-02	.2637-02	.5750	3.870	525.3
15	29.800	.30000	704.00	.3930-01	.4820-01	.5520-01	.9220	.2816-02	.2004-02	.4030	2.863	542.1

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT10)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
15	29.800	.35000	705.00	.7610-01	.9410-01	.1085	.9220	.5536-02	.3881-02	.7530	5.148	549.2
57	29.800	.35500	2090.0	.4230-01	.5320-01	.6210-01	.9220	.3171-02	.2161-02	.3980	2.593	567.9
57	29.800	.36500	2092.0	.3250-01	.4060-01	.4710-01	.9220	.2405-02	.1663-02	.3160	2.059	562.0
57	29.800	.37000	2093.0	.4550-01	.5620-01	.6490-01	.9220	.3314-02	.2323-02	.4560	2.985	555.9
17	29.800	.50000	707.00	.7820-01	.9880-01	.1158	.9220	.5901-02	.3988-02	.7090	4.817	560.6
17	29.800	.60000	708.00	.5340-01	.6570-01	.7530-01	.9220	.3840-02	.2724-02	.5400	3.453	540.1
17	29.800	.70000	709.00	.2820-01	.3460-01	.3980-01	.9220	.2027-02	.1436-02	.2830	1.811	540.9
17	29.800	.80000	710.00	.5660-01	.6920-01	.7900-01	.9220	.4028-02	.2886-02	.5870	3.678	535.0
57	31.430	.44000	2166.0	.8020-01	.1042	.1251	.9220	.6392-02	.4098-02	.6700	4.356	588.6
57	31.430	.92600	2153.0	.7620-01	.9870-01	.1182	.9220	.6038-02	.3895-02	.6440	4.603	586.8
57	33.750	.65000	2086.0	.2430-01	.2950-01	.3360-01	.9220	.1717-02	.1242-02	.2630	1.771	540.0
57	33.750	.92600	2152.0	.7040-01	.9100-01	.1088	.9220	.5557-02	.3597-02	.5980	4.279	585.8
17	37.700	.50000-01	715.00	.3690	.4548	.4503	.9521	.2296-01	.1881-01	3.681	24.07	542.5
17	37.700	.70000-01	716.00	.4348	.5412	.5524	.9459	.2816-01	.2217-01	4.163	28.36	550.4
17	37.700	.10000+00	717.00	.2858	.3482	.3677	.9379	.1874-01	.1457-01	3.001	19.61	532.3
17	37.700	.15000	718.00	.1764	.2145	.2369	.9281	.1208-01	.8990-02	1.865	13.76	530.8
17	37.700	.20000	719.00	.7600-01	.9120-01	.1023	.9229	.5217-02	.3873-02	.8550	5.853	517.4
17	37.700	.30000	720.00	.3910-01	.4770-01	.5450-01	.9220	.2779-02	.1992-02	.4050	2.917	534.8
15	37.700	.35000	721.00	.7790-01	.9560-01	.1095	.9220	.5589-02	.3975-02	.7980	5.540	542.5
15	37.700	.37500	722.00	.8680-01	.1068	.1227	.9220	.6259-02	.4429-02	.8780	6.091	545.0
15	37.700	.50000	723.00	.1216	.1510	.1746	.9220	.8911-02	.6207-02	1.186	8.169	552.2
15	37.700	.60000	724.00	.4840-01	.5930-01	.6800-01	.9220	.3468-02	.2467-02	.4960	3.176	542.3
15	37.700	.70000	725.00	.5380-01	.6640-01	.7640-01	.9220	.3899-02	.2744-02	.5370	3.412	547.6
15	37.700	.80000	726.00	.4610-01	.5620-01	.6400-01	.9220	.3266-02	.2354-02	.4890	3.090	535.6
15	37.700	.87000	727.00	.6100-01	.7600-01	.8820-01	.9220	.4499-02	.3114-02	.5860	3.733	554.9
15	37.700	.92600	728.00	.1053	.1371	.1650	.9220	.8418-02	.5375-02	.8620	6.154	582.9
16	39.000	.10000-01	993.00	.4739	.5979	.5684	.9599	.2897-01	.2415-01	4.323	31.17	563.6
16	39.000	.25000-01	994.00	.3477	.4276	.4108	.9589	.2094-01	.1772-01	3.518	23.96	544.1
15	180.00	.15000-01	2182.0	.5290	.6931	.6726	.9549	.3432-01	.2699-01	4.234	31.20	586.3
15	180.00	.20000-01	2183.0	.4263	.5361	.5253	.9540	.2680-01	.2175-01	3.949	29.76	561.7
15	180.00	.25000-01	2184.0	.3886	.4815	.4725	.9540	.2411-01	.1983-01	3.821	27.82	550.5
15	180.00	.30000-01	2185.0	.6820-01	.8310-01	.8170-01	.9538	.4170-02	.3481-02	.7230	5.272	535.4
15	180.00	.40000-01	737.00	.3458	.4253	.4247	.9503	.2167-01	.1764-01	3.506	22.90	544.5
15	180.00	.45000-01	738.00	.3346	.4113	.4138	.9487	.2111-01	.1707-01	3.403	22.57	543.9
15	180.00	.60000-01	739.00	.2604	.3189	.3277	.9440	.1672-01	.1329-01	2.692	18.15	540.6
15	180.00	.70000-01	740.00	.2530	.3106	.3235	.9412	.1651-01	.1291-01	2.589	17.54	542.7
15	180.00	.80000-01	741.00	.2041	.2498	.2633	.9386	.1344-01	.1041-01	2.114	15.42	540.3
15	180.00	.10000+00	742.00	.1633	.1986	.2135	.9339	.1089-01	.8330-02	1.740	11.70	534.3
15	180.00	.12500	743.00	.1200	.1459	.1603	.9292	.8177-02	.6124-02	1.285	9.403	533.5
15	180.00	.15000	744.00	.8900-01	.1080	.1205	.9256	.6148-02	.4541-02	.9600	6.727	531.8
15	180.00	.17500	745.00	.5120-01	.6180-01	.6950-01	.9233	.3545-02	.2610-02	.5640	4.283	527.1
15	180.00	.20000	746.00	.4160-01	.5030-01	.5690-01	.9221	.2902-02	.2124-02	.4590	3.313	527.3
15	180.00	.21500	747.00	.3590-01	.4370-01	.4980-01	.9220	.2539-02	.1833-02	.3820	2.665	534.7

DATE 23 JUN 81

IH72. AEDC V41A-R2A. INTEGRATED VEHICLE HEATING RATES

IH72. OTS W/PROTUBERANCES. EXTERNAL TANK HI/HREF

(RVZTI0)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
15	180.00	.23000	748.00	.2850-01	.3480-01	.3970-01	.9220	.2023-02	.1454-02	.3000	2.227	537.1
15	180.00	.24000	749.00	.1430-01	.1740-01	.1990-01	.9220	.1016-02	.7271-03	.1480	1.121	539.5
15	180.00	.25000	750.00	.5800-02	.7100-02	.8100-02	.9220	.4131-03	.2959-03	.6000-01	.4910	538.9
15	180.00	.30000	751.00	.2140-01	.2630-01	.3020-01	.9220	.1540-02	.1094-02	.2190	1.440	543.0
15	180.00	.35000	752.00	.2490-01	.3050-01	.3490-01	.9220	.1779-02	.1272-02	.2590	1.643	539.7
15	180.00	.40000	753.00	.2720-01	.3320-01	.3800-01	.9220	.1938-02	.1386-02	.2820	1.819	539.8
15	180.00	.50000	754.00	.3610-01	.4440-01	.5090-01	.9220	.2599-02	.1842-02	.3670	2.404	544.1
15	180.00	.60000	755.00	.2650-01	.3250-01	.3730-01	.9220	.1901-02	.1351-02	.2710	1.741	542.7
15	180.00	.70000	756.00	.2480-01	.3050-01	.3500-01	.9220	.1787-02	.1267-02	.2520	1.666	544.3
15	180.00	.80000	757.00	.2670-01	.3270-01	.3740-01	.9220	.1909-02	.1362-02	.2760	1.733	540.8
15	235.00	.22000	759.00	.6390-01	.7850-01	.8910-01	.9240	.4545-02	.3261-02	.6520	4.858	543.3
15	235.00	.25000	760.00	.3420-01	.4200-01	.4800-01	.9227	.2447-02	.1743-02	.3490	2.735	543.3
15	235.00	.27000	761.00	.2490-01	.3060-01	.3490-01	.9227	.1781-02	.1269-02	.2540	1.892	543.2
15	235.00	.30000	762.00	.5930-01	.7320-01	.8390-01	.9227	.4283-02	.3024-02	.5910	3.555	547.7
15	235.00	.32000	763.00	.6290-01	.7750-01	.8880-01	.9227	.4531-02	.3211-02	.6340	3.753	545.8
15	235.00	.34000	764.00	.8890-01	.1101	.1266	.9227	.6458-02	.4534-02	.8750	5.182	550.2
15	235.00	.36000	765.00	.1058	.1315	.1515	.9227	.7731-02	.5400-02	1.029	6.172	552.6
15	235.00	.38000	766.00	.6360-01	.7850-01	.9010-01	.9227	.4598-02	.3244-02	.6330	3.848	548.0
17	247.00	.23000	768.00	.6820-01	.8400-01	.9540-01	.9241	.4864-02	.3479-02	.6840	5.105	541.5
17	247.00	.25000	769.00	.4040-01	.4950-01	.5620-01	.9233	.2867-02	.2057-02	.4120	3.222	537.8
17	247.00	.27000	770.00	.4740-01	.5880-01	.6740-01	.9233	.3436-02	.2417-02	.4610	3.365	547.3
17	247.00	.30000	772.00	.9200-01	.1143	.1312	.9233	.6689-02	.4689-02	.8880	5.423	548.8
17	247.00	.31000	773.00	.1074	.1341	.1546	.9233	.7880-02	.5477-02	1.017	6.146	552.6
17	247.00	.32000	774.00	.1370	.1727	.2007	.9233	.1023-01	.6982-02	1.245	7.436	559.9
17	247.00	.32500	775.00	.1450	.1834	.2136	.9233	.1089-01	.7392-02	1.303	7.794	562.0
17	247.00	.33000	776.00	.1556	.1970	.2295	.9233	.1170-01	.7934-02	1.396	8.372	562.3
17	247.00	.33500	777.00	.1528	.1938	.2262	.9233	.1153-01	.7787-02	1.358	8.139	563.9
17	247.00	.34000	778.00	.1536	.1943	.2263	.9233	.1154-01	.7828-02	1.379	8.273	562.1
17	247.00	.34500	779.00	.1570	.1979	.2299	.9233	.1172-01	.8002-02	1.428	8.602	559.7
17	247.00	.35000	780.00	.1266	.1581	.1824	.9233	.9297-02	.6455-02	1.195	7.242	553.1
17	247.00	.35500	781.00	.1422	.1785	.2067	.9233	.1054-01	.7250-02	1.316	7.980	556.8
15	247.00	.36000	782.00	.1068	.1332	.1535	.9233	.7832-02	.5451-02	1.022	6.202	555.7
15	247.00	.36500	783.00	.9300-01	.1155	.1326	.9233	.6766-02	.4745-02	.9060	5.489	552.4
15	247.00	.37000	784.00	.8700-01	.1078	.1235	.9233	.6303-02	.4440-02	.8570	5.226	550.3
15	247.00	.37500	785.00	.9590-01	.1186	.1358	.9233	.6930-02	.4894-02	.9500	5.847	549.1
15	247.00	.38000	786.00	.9210-01	.1136	.1298	.9233	.6622-02	.4700-02	.9230	5.707	546.8
15	247.00	.39000	787.00	.7130-01	.8740-01	.9930-01	.9233	.5066-02	.3640-02	.7370	4.584	540.6
15	247.00	.40000	788.00	.4720-01	.5760-01	.6530-01	.9233	.3332-02	.2411-02	.4970	3.122	537.0
16	247.00	.50000	789.00	.1360-01	.1640-01	.1840-01	.9233	.9372-03	.6913-03	.1500	.9730	525.5
16	247.00	.60000	790.00	.4080-01	.4990-01	.5670-01	.9233	.2891-02	.2078-02	.4210	2.770	540.1
16	247.00	.70000	791.00	.5520-01	.6820-01	.7800-01	.9233	.3974-02	.2816-02	.5510	3.887	547.1
16	247.00	.80000	792.00	.3270-01	.4010-01	.4550-01	.9233	.2319-02	.1669-02	.3390	2.140	539.4
16	247.00	.90000	793.00	.5650-01	.7050-01	.8130-01	.9233	.4142-02	.2878-02	.5370	3.447	556.0

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT10)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
57	247.00	.92600	2144.0	.7960-01	.1018	.1196	.9233	.6109-02	.4066-02	.7010	4.823	579.7
57	247.00	.93000	2149.0	.1174	.1523	.1809	.9233	.9245-02	.5999-02	.9850	6.970	587.9
57	250.57	.92600	2143.0	.9380-01	.1211	.1431	.9235	.7309-02	.4795-02	.8020	5.503	584.8
57	250.57	.93000	2148.0	.1097	.1447	.1742	.9235	.8902-02	.5605-02	.8710	5.998	596.7
57	250.57	.93700	2087.0	.2418	.3458	.4479	.9235	.2289-01	.1235-01	1.544	10.58	627.1
16	258.00	.27000	794.00	.4690-01	.5780-01	.6570-01	.9239	.3347-02	.2393-02	.4740	3.385	544.4
16	258.00	.29000	795.00	.1071	.1336	.1533	.9239	.7813-02	.5461-02	1.025	6.289	555.0
55	258.00	.32000	798.00	.2104	.2707	.3183	.9239	.1622-01	.1072-01	1.799	10.67	579.9
55	258.00	.34000	802.00	.2116	.2734	.3225	.9239	.1643-01	.1078-01	1.783	10.59	582.3
55	258.00	.34500	803.00	.2091	.2667	.3114	.9239	.1587-01	.1066-01	1.845	11.03	574.5
55	258.00	.35500	805.00	.1402	.1769	.2048	.9239	.1044-01	.7146-02	1.288	7.729	567.4
55	258.00	.36000	806.00	.1344	.1697	.1965	.9239	.1001-01	.6852-02	1.234	7.424	567.6
55	258.00	.36500	807.00	.1307	.1646	.1903	.9239	.9700-02	.6663-02	1.210	7.304	566.0
55	258.00	.37000	808.00	.1218	.1522	.1750	.9239	.8920-02	.6209-02	1.162	7.052	560.5
55	258.00	.37500	809.00	.1106	.1368	.1562	.9239	.7961-02	.5635-02	1.097	6.681	553.0
55	258.00	.38000	810.00	.8430-01	.1033	.1171	.9239	.5967-02	.4296-02	.8720	5.366	544.8
16	258.00	.40000	812.00	.3130-01	.3770-01	.4220-01	.9239	.2149-02	.1594-02	.3490	2.173	523.9
57	258.00	.93500	2151.0	.9170-01	.1198	.1425	.9239	.7279-02	.4687-02	.7530	5.199	591.5
16	270.00	.40000-01	985.00	.4179	.5165	.4636	.9742	.2363-01	.2130-01	4.145	26.94	548.0
16	270.00	.50000-01	986.00	.4164	.5155	.4696	.9705	.2394-01	.2122-01	4.100	26.48	549.4
16	270.00	.60000-01	987.00	.3809	.4692	.4350	.9669	.2217-01	.1941-01	3.832	25.24	545.2
16	270.00	.70000-01	988.00	.3723	.4600	.4327	.9634	.2205-01	.1898-01	3.697	24.84	547.8
16	270.00	.80000-01	989.00	.3308	.4080	.3898	.9600	.1987-01	.1686-01	3.309	23.45	546.4
16	270.00	.10000+00	990.00	.2952	.3612	.3554	.9536	.1812-01	.1505-01	3.059	20.03	539.3
16	270.00	.15000	991.00	.1846	.2251	.2355	.9399	.1200-01	.9410-02	1.943	14.35	536.1
16	270.00	.20000	992.00	.1125	.1362	.1489	.9298	.7588-02	.5735-02	1.225	8.355	529.1
16	270.00	.23000	813.00	.8140-01	.1005	.1135	.9256	.5785-02	.4148-02	.8100	5.886	547.4
16	270.00	.24000	814.00	.6940-01	.8590-01	.9780-01	.9246	.4982-02	.3538-02	.6830	5.521	549.4
16	270.00	.25000	815.00	.4850-01	.5970-01	.6770-01	.9246	.3449-02	.2471-02	.4880	3.854	545.1
16	270.00	.27000	816.00	.4730-01	.5830-01	.6610-01	.9246	.3371-02	.2412-02	.4750	3.376	545.8
16	270.00	.29000	817.00	.2110	.2706	.3159	.9246	.1610-01	.1075-01	1.814	11.12	573.9
16	270.00	.30000	818.00	.3005	.3880	.4555	.9246	.2322-01	.1532-01	2.521	15.17	578.0
16	270.00	.31000	819.00	.2976	.3844	.4514	.9246	.2301-01	.1517-01	2.495	14.89	578.1
16	270.00	.32000	820.00	.3020	.3884	.4546	.9246	.2317-01	.1539-01	2.570	15.31	575.7
16	270.00	.32500	821.00	.3004	.3907	.4613	.9246	.2351-01	.1531-01	2.460	14.57	582.0
16	270.00	.33000	822.00	.1894	.2541	.3076	.9246	.1568-01	.9653-02	1.407	8.298	596.8
16	270.00	.33500	823.00	.4058	.5447	.6595	.9246	.3362-01	.2068-01	3.012	17.81	597.0
16	270.00	.34500	825.00	.3155	.4040	.4712	.9246	.2401-01	.1608-01	2.727	16.27	573.0
16	270.00	.35000	826.00	.2661	.3430	.4022	.9246	.2050-01	.1356-01	2.246	13.37	577.0
16	270.00	.36000	828.00	.4204	.5579	.6693	.9246	.3411-01	.2143-01	3.228	19.03	592.0
16	270.00	.37000	830.00	.2730-01	.3310-01	.3720-01	.9246	.1894-02	.1390-02	.2930	1.787	532.0
16	270.00	.37500	831.00	.1261	.1546	.1748	.9246	.8908-02	.6425-02	1.292	7.894	541.6
16	270.00	.38000	832.00	.8460-01	.1028	.1154	.9246	.5881-02	.4311-02	.9040	5.550	532.8

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
16	270.00	.39000	833.00	.4130-01	.5010-01	.5610-01	.9246	.2859-02	.2106-02	.4480	2.786	529.8
16	270.00	.40000	834.00	.7180-01	.8780-01	.9910-01	.9246	.5051-02	.3658-02	.7430	4.607	539.5
16	270.00	.50000	835.00	.4140-01	.5050-01	.5680-01	.9246	.2893-02	.2110-02	.4370	2.776	535.6
16	270.00	.60000	836.00	.4040-01	.4950-01	.5600-01	.9246	.2854-02	.2057-02	.4130	2.754	542.1
16	270.00	.70000	837.00	.7200-01	.8960-01	.1023	.9246	.5215-02	.3669-02	.6930	4.865	553.6
16	270.00	.80000	838.00	.1083	.1342	.1529	.9246	.7792-02	.5519-02	1.060	6.575	550.6
16	270.00	.90000	839.00	.5900-01	.7440-01	.8590-01	.9246	.4377-02	.3007-02	.5380	3.413	563.6
57	270.00	.92600	2141.0	.1086	.1518	.1902	.9246	.9721-02	.5551-02	.7340	4.844	619.9
57	270.00	.93000	2146.0	.1705	.2437	.3116	.9246	.1592-01	.8711-02	1.091	7.406	626.8
57	270.00	.93500	2150.0	.2707	.3674	.4489	.9246	.2293-01	.1383-01	1.976	13.53	609.2
57	289.43	.92600	2140.0	.1968	.2738	.3394	.9253	.1734-01	.1006-01	1.345	9.081	618.3
57	289.43	.93000	2145.0	.3064	.4689	.6356	.9253	.3248-01	.1566-01	1.699	11.55	643.6
16	292.50	.23000	840.00	.9160-01	.1136	.1281	.9265	.6528-02	.4666-02	.8930	7.186	551.1
16	292.50	.25000	841.00	.5140-01	.6350-01	.7190-01	.9253	.3663-02	.2620-02	.5110	3.956	547.8
16	292.50	.27000	842.00	.3760-01	.4630-01	.5220-01	.9253	.2663-02	.1915-02	.3780	2.646	545.2
16	292.50	.35000	845.00	.2686	.3489	.4092	.9253	.2086-01	.1369-01	2.211	13.32	581.1
16	292.50	.37000	846.00	.1699	.2134	.2443	.9253	.1245-01	.8660-02	1.578	9.657	560.4
16	292.50	.40000	847.00	.1054	.1294	.1459	.9253	.7436-02	.5370-02	1.072	6.696	542.9
16	292.50	.45000	848.00	.7180-01	.8760-01	.9830-01	.9253	.5010-02	.3659-02	.7530	4.754	536.9
16	292.50	.50000	849.00	.6650-01	.8170-01	.9210-01	.9253	.4693-02	.3391-02	.6780	4.366	542.7
16	292.50	.60000	851.00	.7980-01	.9890-01	.1122	.9253	.5720-02	.4067-02	.7810	5.224	550.6
16	292.50	.65000	852.00	.1171	.1473	.1687	.9253	.8601-02	.5969-02	1.082	7.308	561.3
16	292.50	.70000	853.00	.1858	.2385	.2774	.9253	.1414-01	.9469-02	1.591	11.01	574.6
16	292.50	.75000	854.00	.1253	.1584	.1821	.9253	.9282-02	.6388-02	1.137	7.306	564.7
16	292.50	.80000	855.00	.1311	.1642	.1877	.9253	.9568-02	.6681-02	1.228	7.942	558.7
57	292.50	.82000	2129.0	.1386	.1726	.1963	.9253	.1003-01	.7083-02	1.353	8.233	561.0
57	292.50	.83000	2130.0	.1321	.1646	.1873	.9253	.9570-02	.6749-02	1.286	7.887	561.6
57	292.50	.85000	2132.0	.1298	.1621	.1849	.9253	.9445-02	.6631-02	1.250	7.701	563.6
57	292.50	.86000	2133.0	.1313	.1642	.1874	.9253	.9574-02	.6710-02	1.260	7.716	564.3
57	292.50	.87000	2134.0	.1342	.1681	.1920	.9253	.9810-02	.6855-02	1.278	7.869	565.6
57	292.50	.88000	2135.0	.1337	.1681	.1926	.9253	.9840-02	.6832-02	1.255	7.717	568.3
57	292.50	.89000	2136.0	.2095	.2654	.3058	.9253	.1562-01	.1070-01	1.908	11.73	573.8
16	292.50	.90000	856.00	.2250	.2915	.3415	.9253	.1740-01	.1147-01	1.865	11.90	580.0
57	292.50	.92600	2138.0	.1438	.1910	.2278	.9253	.1164-01	.7350-02	1.120	7.633	599.7
57	292.50	.93000	2139.0	.1801	.2479	.3046	.9253	.1556-01	.9201-02	1.264	8.772	614.7
57	301.50	.82000	2116.0	.1097	.1365	.1551	.9254	.7925-02	.5605-02	1.075	6.543	560.3
57	301.50	.83000	2117.0	.1110	.1381	.1569	.9254	.8019-02	.5671-02	1.087	6.582	560.4
57	301.50	.83500	2118.0	.1132	.1410	.1605	.9254	.8199-02	.5782-02	1.101	6.606	561.7
57	301.50	.84000	2119.0	.1163	.1449	.1649	.9254	.8425-02	.5942-02	1.132	6.847	561.6
57	301.50	.85000	2120.0	.1177	.1466	.1667	.9254	.8518-02	.6015-02	1.149	6.972	561.0
57	301.50	.86000	2021.0	.9170-01	.1142	.1299	.9254	.6640-02	.4688-02	.8950	5.462	561.1
57	301.50	.87000	2122.0	.8270-01	.1031	.1173	.9254	.5995-02	.4226-02	.8040	4.889	561.9
57	301.50	.88000	2123.0	.8910-01	.1120	.1283	.9254	.6554-02	.4554-02	.8380	5.107	568.1

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT10)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
57	301.50	.89000	2124.0	.1545	.1953	.2245	.9254	.1147-01	.7894-02	1.421	8.719	572.1
57	301.50	.90000	2125.0	.1735	.2194	.2523	.9254	.1289-01	.8864-02	1.593	9.853	572.4
57	301.50	.92600	2127.0	.2499	.3255	.3825	.9254	.1954-01	.1277-01	2.068	12.68	590.1
57	301.50	.93500	2128.0	.2361	.3077	.3617	.9254	.1848-01	.1206-01	1.950	12.86	590.4
57	305.40	.82000	2113.0	.9940-01	.1228	.1390	.9253	.7102-02	.5080-02	1.002	6.082	554.8
57	305.40	.83000	2114.0	.1029	.1275	.1446	.9253	.7388-02	.5256-02	1.023	6.200	557.5
57	305.40	.83500	2115.0	.1147	.1444	.1656	.9253	.8461-02	.5862-02	1.072	6.513	569.2
16	305.40	.84000	857.00	.1347	.1681	.1915	.9253	.9760-02	.6867-02	1.285	7.906	555.5
55	305.40	.85000	858.00	.1161	.1440	.1634	.9253	.8330-02	.5918-02	1.141	7.060	554.9
55	305.40	.86000	859.00	.8760-01	.1086	.1232	.9253	.6278-02	.4467-02	.8650	5.399	554.1
55	305.40	.87000	860.00	.8810-01	.1094	.1243	.9253	.6337-02	.4488-02	.8590	5.370	556.3
55	305.40	.88000	861.00	.1050	.1311	.1494	.9253	.7616-02	.5351-02	1.005	6.272	559.9
55	305.40	.89000	862.00	.1419	.1795	.2066	.9253	.1053-01	.7231-02	1.288	8.051	569.5
55	305.40	.90000	863.00	.1589	.2013	.2319	.9253	.1182-01	.8099-02	1.436	9.022	570.3
55	305.40	.91000	864.00	.1031	.1313	.1518	.9253	.7739-02	.5253-02	.9130	6.549	573.8
55	305.40	.92600	865.00	.1588	.2100	.2498	.9253	.1273-01	.8094-02	1.240	8.776	594.4
55	309.30	.80000	866.00	.1079	.1328	.1499	.9253	.7641-02	.5498-02	1.095	6.879	548.4
55	309.30	.81000	867.00	.1032	.1272	.1438	.9253	.7331-02	.5259-02	1.040	6.489	549.9
55	309.30	.82000	868.00	.9550-01	.1178	.1332	.9253	.6787-02	.4868-02	.9620	6.000	550.1
55	309.30	.83000	869.00	.9900-01	.1229	.1395	.9253	.7111-02	.5048-02	.9730	6.070	555.0
55	315.00	.50000-01	871.00	.4235	.5291	.4760	.9724	.2426-01	.2158-01	4.041	25.66	560.4
55	315.00	.60000-01	872.00	.3872	.4832	.4421	.9687	.2253-01	.1973-01	3.711	24.48	559.6
16	315.00	.70000-01	873.00	.3868	.4779	.4461	.9651	.2274-01	.1971-01	3.841	26.12	547.8
16	315.00	.10000+00	875.00	.3041	.3717	.3633	.9552	.1852-01	.1550-01	3.162	20.84	538.5
16	315.00	.15000	876.00	.1982	.2418	.2515	.9412	.1282-01	.1010-01	2.080	15.30	536.7
16	315.00	.20000	877.00	.1161	.1404	.1528	.9307	.7789-02	.5916-02	1.267	8.622	528.5
16	315.00	.35000	878.00	.1073	.1325	.1500	.9251	.7645-02	.5470-02	1.070	6.647	547.0
16	315.00	.40000	879.00	.3770-01	.4060-01	.4220-01	.9251	.2149-02	.1922-02	1.009	7.673	217.4
16	315.00	.50000	880.00	.9710-01	.1223	.1405	.9251	.7159-02	.4948-02	.8910	6.073	562.5
16	315.00	.55000	881.00	.1124	.1418	.1630	.9251	.8310-02	.5727-02	1.025	6.769	563.7
16	315.00	.60000	882.00	.1197	.1493	.1703	.9251	.8678-02	.6104-02	1.145	7.661	555.1
16	315.00	.65000	883.00	.1191	.1480	.1683	.9251	.8578-02	.6072-02	1.156	7.870	552.2
16	315.00	.70000	884.00	.1035	.1287	.1464	.9251	.7464-02	.5276-02	1.001	7.093	552.9
16	315.00	.75000	885.00	.9700-01	.1205	.1371	.9251	.6986-02	.4943-02	.9400	5.909	552.4
16	315.00	.80000	886.00	.1005	.1240	.1404	.9251	.7158-02	.5122-02	1.002	6.295	547.0
16	315.00	.84000	887.00	.1285	.1610	.1843	.9251	.9393-02	.6548-02	1.203	7.515	558.9
55	315.00	.85000	888.00	.1376	.1733	.1989	.9251	.1014-01	.7015-02	1.275	8.004	565.9
55	315.00	.87000	890.00	.1294	.1619	.1850	.9251	.9431-02	.6597-02	1.229	7.757	561.3
55	315.00	.88000	891.00	.1305	.1639	.1878	.9251	.9574-02	.6652-02	1.220	7.732	564.2
55	315.00	.89000	892.00	.1550	.1951	.2239	.9251	.1141-01	.7899-02	1.436	9.253	565.8
55	315.00	.90000	893.00	.1885	.2388	.2754	.9251	.1404-01	.9607-02	1.704	11.09	570.3
55	315.00	.91000	894.00	.1245	.1576	.1815	.9251	.9251-02	.6347-02	1.132	8.165	569.3
55	315.00	.92600	895.00	.1907	.2492	.2941	.9251	.1499-01	.9719-02	1.548	11.02	588.4

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT10)

RUN NUMBER	PHI	X/L_T	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
55	322.30	.42000	897.00	.1327	.1696	.1971	.9249	.1005-01	.6762-02	1.162	7.362	575.8
55	322.30	.43500	898.00	.1466	.1879	.2188	.9249	.1115-01	.7473-02	1.272	7.831	577.4
55	322.30	.45000	899.00	.1315	.1687	.1967	.9249	.1003-01	.6701-02	1.135	7.313	578.2
55	322.30	.50000	900.00	.1289	.1636	.1891	.9249	.9640-02	.6569-02	1.159	7.624	571.3
55	322.30	.60000	901.00	.1499	.1875	.2145	.9249	.1093-01	.7640-02	1.425	9.396	561.1
55	322.30	.70000	902.00	.1105	.1373	.1563	.9249	.7965-02	.5634-02	1.082	7.351	555.6
57	324.45	.40500	2109.0	.1197	.1534	.1788	.9248	.9136-02	.6115-02	1.046	6.483	580.9
57	324.45	.41000	2110.0	.1264	.1632	.1912	.9248	.9772-02	.6461-02	1.079	6.672	585.1
57	324.45	.92600	2164.0	.1546	.1989	.2325	.9248	.1188-01	.7899-02	1.334	9.309	583.2
57	326.85	.40000	2107.0	.8930-01	.1123	.1292	.9246	.6600-02	.4564-02	.8390	5.230	568.3
57	326.85	.40500	2108.0	.1187	.1509	.1749	.9246	.8936-02	.6065-02	1.070	6.647	575.6
57	326.85	.92600	2163.0	.1476	.1912	.2249	.9246	.1149-01	.7540-02	1.243	8.656	587.3
57	330.20	.40000	2104.0	.9620-01	.1208	.1389	.9245	.7096-02	.4914-02	.9080	5.662	567.3
57	330.20	.40500	2105.0	.1102	.1389	.1601	.9245	.8181-02	.5631-02	1.026	6.392	569.8
55	330.20	.41000	2106.0	.1380	.1750	.2027	.9245	.1036-01	.7050-02	1.254	7.772	574.2
55	330.20	.42000	905.00	.1312	.1649	.1897	.9245	.9667-02	.6689-02	1.226	7.838	564.3
55	330.20	.43500	906.00	.1579	.2010	.2335	.9245	.1190-01	.8047-02	1.403	8.980	573.3
55	330.20	.45000	907.00	.1756	.2267	.2663	.9245	.1357-01	.8950-02	1.484	9.515	581.8
55	330.20	.50000	908.00	.1678	.2136	.2483	.9245	.1265-01	.8552-02	1.490	10.51	573.5
55	330.20	.60000	909.00	.1597	.1997	.2289	.9245	.1167-01	.8140-02	1.520	9.876	560.9
55	330.20	.70000	910.00	.1240	.1538	.1752	.9245	.8929-02	.6322-02	1.223	8.215	554.2
55	330.20	.80000	911.00	.6960-01	.8530-01	.9650-01	.9245	.4916-02	.3546-02	.7180	4.610	545.1
55	330.20	.87000	912.00	.1770-01	.2160-01	.2430-01	.9245	.1239-02	.9004-03	.1860	1.192	541.2
57	330.20	.92600	2162.0	.1424	.1863	.2210	.9245	.1129-01	.7275-02	1.161	8.043	592.4
57	334.98	.92600	2161.0	.1739	.2323	.2811	.9242	.1436-01	.8883-02	1.327	9.114	602.7
55	334.98	.93500	913.00	.3723	.5358	.6927	.9242	.3530-01	.1898-01	2.324	16.26	625.2
55	334.98	.94500	914.00	.1010	.1242	.1408	.9242	.7178-02	.5149-02	1.032	7.431	547.2
55	337.50	.40000-01	915.00	.4495	.5606	.5046	.9724	.2572-01	.2291-01	4.320	27.21	559.1
55	337.50	.50000-01	916.00	.4153	.5172	.4736	.9688	.2414-01	.2117-01	4.017	25.76	557.9
55	337.50	.70000-01	918.00	.3432	.4243	.4020	.9617	.2049-01	.1749-01	3.424	23.74	551.9
55	337.50	.80000-01	919.00	.3293	.4061	.3908	.9584	.1992-01	.1678-01	3.316	22.59	550.1
55	337.50	.10000+00	920.00	.2712	.3316	.3285	.9521	.1675-01	.1382-01	2.840	19.02	542.2
55	337.50	.15000	921.00	.1730	.2104	.2213	.9387	.1128-01	.8816-02	1.850	13.47	537.8
55	337.50	.20000	922.00	.1054	.1274	.1398	.9289	.7124-02	.5370-02	1.159	7.777	531.9
55	337.50	.42000	923.00	.1600	.2026	.2350	.9241	.1198-01	.8156-02	1.451	9.359	569.7
57	337.50	.42500	2167.0	.1954	.2494	.2912	.9241	.1488-01	.9982-02	1.731	10.99	578.6
55	337.50	.43500	924.00	.1656	.2083	.2404	.9241	.1225-01	.8441-02	1.540	9.983	565.2
55	337.50	.85000	926.00	.7920-01	.9850-01	.1126	.9241	.5741-02	.4038-02	.7730	4.973	556.3
55	337.50	.86000	927.00	.9350-01	.1167	.1338	.9241	.6822-02	.4766-02	.8970	5.785	559.3
55	337.50	.87000	928.00	.1240	.1554	.1788	.9241	.9113-02	.6320-02	1.170	7.552	562.5
55	337.50	.88000	929.00	.5770-01	.7000-01	.7870-01	.9241	.4013-02	.2940-02	.6240	4.107	535.4
55	337.50	.89000	930.00	.1283	.1640	.1916	.9241	.9767-02	.6542-02	1.124	7.294	575.8
55	337.50	.90000	931.00	.1378	.1780	.2098	.9241	.1069-01	.7023-02	1.162	7.694	582.2

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT10)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
55	337.50	.91000	932.00	.1114	.1454	.1729	.9241	.8810-02	.5676-02	.9060	6.492	588.1
16	343.12	.41500	934.00	.1422	.1767	.2025	.9237	.1032-01	.7250-02	1.380	8.927	552.2
16	343.12	.42000	935.00	.1372	.1711	.1967	.9237	.1002-01	.6993-02	1.310	8.533	555.3
16	343.12	.42500	936.00	.1990	.2523	.2935	.9237	.1496-01	.1014-01	1.784	11.59	566.7
16	343.12	.44000	938.00	.7600-02	.1753	-.1660-01	.9237	-.8453-03	.3880-03	.1500-01	.9100-01	703.8
16	343.12	.44500	939.00	.2250	.2904	.3428	.9237	.1747-01	.1147-01	1.891	12.37	577.7
16	343.12	.45000	940.00	.2122	.2728	.3209	.9237	.1636-01	.1081-01	1.807	11.83	575.5
16	343.12	.50000	941.00	.1340	.1700	.1979	.9237	.1009-01	.6828-02	1.196	8.032	567.4
16	343.12	.60000	942.00	.1456	.1826	.2107	.9237	.1074-01	.7420-02	1.359	8.711	559.4
16	343.12	.80000	944.00	.1046	.1295	.1481	.9237	.7546-02	.5333-02	1.029	6.707	549.6
57	345.56	.42500	2168.0	.1613	.2100	.2497	.9236	.1276-01	.8242-02	1.338	8.444	589.8
57	345.56	.92600	2160.0	.2122	.2880	.3546	.9238	.1812-01	.1084-01	1.548	10.60	609.3
16	348.00	.35000	945.00	.6810-01	.8320-01	.9440-01	.9235	.4809-02	.3469-02	.7080	4.505	538.6
16	348.00	.36000	946.00	.7270-01	.8880-01	.1007	.9235	.5133-02	.3707-02	.7580	4.842	538.0
16	348.00	.37000	947.00	.7450-01	.9100-01	.1032	.9235	.5260-02	.3797-02	.7760	4.969	538.2
55	348.00	.37500	948.00	.7700-01	.9470-01	.1079	.9235	.5498-02	.3926-02	.7860	5.006	547.6
55	348.00	.38000	949.00	.7810-01	.9610-01	.1096	.9235	.5585-02	.3981-02	.7930	5.096	548.4
55	348.00	.38500	950.00	.8270-01	.1020	.1163	.9235	.5927-02	.4218-02	.8370	5.389	549.2
55	348.00	.39000	951.00	.8810-01	.1089	.1244	.9235	.6342-02	.4490-02	.8800	5.693	551.7
55	348.00	.39500	952.00	.1027	.1272	.1457	.9235	.7428-02	.5233-02	1.013	6.452	554.1
55	348.00	.40000	953.00	.1039	.1289	.1478	.9235	.7533-02	.5297-02	1.021	6.615	554.9
55	348.00	.41000	955.00	.1132	.1416	.1633	.9235	.8326-02	.5770-02	1.076	6.966	561.3
55	348.00	.41500	956.00	.1308	.1648	.1912	.9235	.9743-02	.6668-02	1.209	7.833	566.4
55	348.00	.42000	957.00	.1571	.1990	.2319	.9235	.1182-01	.8005-02	1.419	9.201	570.4
55	348.00	.42500	958.00	.1488	.1884	.2195	.9235	.1119-01	.7582-02	1.347	8.735	570.0
55	348.00	.43000	959.00	.2085	.2727	.3259	.9235	.1661-01	.1063-01	1.689	10.82	588.7
55	348.00	.44000	960.00	.2305	.2992	.3554	.9235	.1811-01	.1175-01	1.912	12.31	584.9
55	348.00	.44500	961.00	.2685	.3484	.4138	.9235	.2109-01	.1368-01	2.229	14.35	584.7
55	348.00	.47000	965.00	.1940	.2483	.2916	.9235	.1486-01	.9888-02	1.690	11.09	576.7
55	348.00	.85000	968.00	.8060-01	.1002	.1150	.9235	.5864-02	.4109-02	.7860	5.071	556.4
55	348.00	.86000	969.00	.9330-01	.1169	.1351	.9235	.6884-02	.4754-02	.8790	5.674	562.7
57	352.20	.93700	2089.0	.1152	.1498	.1785	.9232	.9121-02	.5884-02	.9570	6.555	589.4
57	354.00	.42500	2169.0	.3640-01	.4460-01	.5090-01	.9231	.2599-02	.1857-02	.3760	2.424	549.4
57	354.00	.43000	2174.0	.2291	.3062	.3738	.9231	.1910-01	.1171-01	1.748	10.96	602.7
57	354.00	.43500	2177.0	.2074	.2793	.3431	.9231	.1753-01	.1060-01	1.549	9.700	605.9
57	354.00	.44000	2179.0	.1647	.2232	.2758	.9231	.1409-01	.8414-02	1.207	7.549	608.6
57	355.16	.92600	2158.0	.1484	.2131	.2786	.9231	.1424-01	.7581-02	.9380	6.467	628.3

EXTERNAL TANK

PARAMETRIC DATA

ALPHA = -5.000 BETA = 9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
27	-4.960	9.000	4.020	72.50	741.0	175.1	.4650	5.260	2607.	.2228-03	.1410-06	4.119
28	-4.950	8.900	4.020	72.80	742.0	175.2	.4670	5.282	2607.	.2236-03	.1411-06	4.133
29	-4.990	9.000	4.020	72.70	735.0	173.7	.4660	5.276	2596.	.2252-03	.1399-06	4.180
52	-4.940	9.000	4.020	72.40	752.0	177.6	.4640	5.254	2625.	.2194-03	.1430-06	4.028
53	-4.940	9.000	4.020	72.30	748.0	176.7	.4640	5.246	2618.	.2202-03	.1423-06	4.053
54	-4.950	9.000	4.020	72.20	747.0	176.6	.4630	5.236	2618.	.2199-03	.1422-06	4.048

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
27	.5100-01	.1134-01
28	.5111-01	.1132-01
29	.5102-01	.1127-01
52	.5107-01	.1145-01
53	.5100-01	.1142-01
54	.5095-01	.1143-01

TEST DATA

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
28	.00000	.25000-01	2187.0	.4873	.6175	.5565	.9705	.2844-01	.2491-01	4.380	30.64	565.7
28	.00000	.30000-01	2188.0	.4741	.6013	.5422	.9703	.2771-01	.2423-01	4.247	29.89	566.3
27	.00000	.40000-01	600.00	.4249	.5249	.4869	.9666	.2483-01	.2167-01	4.213	27.09	546.7
27	.00000	.50000-01	601.00	.3918	.4860	.4574	.9630	.2333-01	.1998-01	3.820	24.59	550.0
27	.00000	.70000-01	603.00	.3229	.3983	.3871	.9562	.1975-01	.1647-01	3.224	22.02	545.3
27	.00000	.80000-01	604.00	.3344	.4127	.4070	.9530	.2076-01	.1706-01	3.335	21.71	545.6
27	.00000	.15000	606.00	.1418	.1722	.1843	.9347	.9401-02	.7232-02	1.516	11.11	531.5
27	.00000	.20000	607.00	.7950-01	.9630-01	.1069	.9264	.5454-02	.4055-02	.8620	5.675	528.6
27	.00000	.21000	608.00	.7560-01	.9270-01	.1044	.9252	.5322-02	.3856-02	.7750	5.373	540.1
27	.00000	.22000	609.00	.6320-01	.7750-01	.8770-01	.9243	.4471-02	.3223-02	.6480	4.837	540.1
27	.00000	.30000	610.00	.5520-01	.6770-01	.7720-01	.9228	.3939-02	.2814-02	.5640	3.872	540.7
27	.00000	.35000	611.00	.5080-01	.6210-01	.7060-01	.9228	.3602-02	.2589-02	.5260	3.522	537.8

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT14)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
27	.00000	.36000	612.00	.5660-01	.6940-01	.7900-01	.9228	.4030-02	.2889-02	.5840	3.938	539.1
27	.00000	.37000	613.00	.5980-01	.7350-01	.8390-01	.9228	.4279-02	.3049-02	.6070	4.091	542.0
27	.00000	.37500	614.00	.5860-01	.7210-01	.8250-01	.9228	.4209-02	.2989-02	.5900	3.974	543.6
29	.00000	.38000	615.00	.6110-01	.7540-01	.8630-01	.9228	.4404-02	.3118-02	.6060	4.088	540.8
29	.00000	.38500	616.00	.6630-01	.8200-01	.9400-01	.9228	.4798-02	.3382-02	.6510	4.383	542.8
29	.00000	.39500	618.00	.8950-01	.1124	.1305	.9228	.6656-02	.4568-02	.8260	5.549	554.4
29	.00000	.40000	619.00	.9860-01	.1241	.1445	.9228	.7370-02	.5033-02	.9000	6.005	556.3
29	.00000	.40500	620.00	.1046	.1308	.1514	.9228	.7724-02	.5336-02	.9800	6.568	551.7
29	.00000	.41000	621.00	.1720	.2168	.2526	.9228	.1289-01	.8776-02	1.561	10.43	557.4
29	.00000	.41500	622.00	.2498	.3166	.3704	.9228	.1890-01	.1274-01	2.221	14.78	561.0
29	.00000	.43000	625.00	.2532	.3259	.3861	.9228	.1970-01	.1292-01	2.130	14.15	570.4
29	.00000	.44000	626.00	.3437	.4499	.5408	.9228	.2759-01	.1753-01	2.731	18.05	579.6
29	.00000	.44500	627.00	.3368	.4395	.5268	.9228	.2688-01	.1719-01	2.706	18.07	577.9
29	.00000	.45000	628.00	.2567	.3284	.3874	.9228	.1976-01	.1310-01	2.203	14.79	567.1
29	.00000	.45500	629.00	.2176	.2751	.3213	.9228	.1639-01	.1110-01	1.952	13.36	559.4
27	.00000	.46000	630.00	.2011	.2579	.3046	.9228	.1554-01	.1026-01	1.728	11.46	572.7
27	.00000	.47000	631.00	.1386	.1774	.2094	.9228	.1068-01	.7069-02	1.196	7.941	571.9
27	.00000	.48000	632.00	.1372	.1753	.2064	.9228	.1053-01	.6997-02	1.193	7.974	570.6
27	.00000	.49000	633.00	.1433	.1823	.2140	.9228	.1091-01	.7311-02	1.267	8.556	567.8
27	.00000	.50000	634.00	.9670-01	.1223	.1428	.9228	.7285-02	.4930-02	.8720	6.050	564.2
27	.00000	.55000	635.00	.9890-01	.1244	.1447	.9228	.7383-02	.5045-02	.9120	6.012	560.4
27	.00000	.60000	636.00	.8890-01	.1104	.1271	.9228	.6480-02	.4533-02	.8630	5.554	550.7
27	.00000	.65000	637.00	.5160-01	.6370-01	.7290-01	.9228	.3720-02	.2633-02	.5150	3.336	545.3
27	.00000	.70000	638.00	.4760-01	.5860-01	.6710-01	.9228	.3421-02	.2427-02	.4780	3.274	544.3
27	.00000	.75000	639.00	.3220-01	.3940-01	.4490-01	.9228	.2289-02	.1641-02	.3320	2.147	539.0
27	.00000	.80000	640.00	.4410-01	.5420-01	.6190-01	.9228	.3157-02	.2247-02	.4460	2.803	542.5
27	.00000	.85000	641.00	.1245	.1555	.1798	.9228	.9170-02	.6352-02	1.183	7.444	554.9
27	.00000	.87000	643.00	.1285	.1626	.1900	.9228	.9692-02	.6552-02	1.157	7.394	564.5
27	.00000	.88000	644.00	.1274	.1621	.1902	.9228	.9703-02	.6496-02	1.125	7.238	568.0
29	.00000	.89000	645.00	.1300-02	.1600-02	.1800-02	.9228	.9104-04	.6592-04	.1400-01	.9000-01	529.6
29	.00000	.95000	649.00	.5990-01	.7380-01	.8450-01	.9228	.4312-02	.3057-02	.5960	4.363	540.3
54	5.6250	.42500	2170.0	.2153	.2790	.3317	.9231	.1690-01	.1097-01	1.796	11.47	583.7
54	5.6250	.43000	2175.0	.2640	.3500	.4244	.9231	.2162-01	.1345-01	2.046	12.99	595.4
54	5.6250	.44000	2180.0	.2420	.3209	.3891	.9231	.1982-01	.1233-01	1.874	11.90	595.4
29	11.250	.35000	650.00	.7840-01	.9670-01	.1104	.9234	.5630-02	.4000-02	.7780	5.242	540.9
29	11.250	.36000	651.00	.9450-01	.1170	.1339	.9234	.6834-02	.4821-02	.9210	6.219	544.2
29	11.250	.37000	652.00	.8940-01	.1110	.1274	.9234	.6498-02	.4564-02	.8630	5.803	546.1
29	11.250	.38000	654.00	.9710-01	.1213	.1398	.9234	.7133-02	.4953-02	.9120	6.137	551.1
29	11.250	.39000	656.00	.1167	.1460	.1685	.9234	.8595-02	.5955-02	1.092	7.340	552.0
29	11.250	.39500	657.00	.1089	.1363	.1573	.9234	.8027-02	.5555-02	1.016	6.827	552.5
29	11.250	.40500	659.00	.1133	.1434	.1669	.9234	.8514-02	.5783-02	1.015	6.819	559.7
29	11.250	.41000	660.00	.1232	.1561	.1818	.9234	.9278-02	.6287-02	1.098	7.351	560.6
29	11.250	.41500	661.00	.1487	.1886	.2200	.9234	.1123-01	.7588-02	1.319	8.797	561.5

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT14)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
29	11.250	.42000	662.00	.1844	.2375	.2803	.9234	.1430-01	.9409-02	1.548	10.31	570.7
29	11.250	.42500	663.00	.2280	.2973	.3545	.9234	.1809-01	.1163-01	1.836	12.23	577.4
29	11.250	.43000	664.00	.2749	.3667	.4458	.9234	.2275-01	.1402-01	2.059	13.76	588.4
29	11.250	.44000	665.00	.3125	.4182	.5099	.9234	.2602-01	.1594-01	2.318	15.39	589.9
29	11.250	.45000	666.00	.2942	.3897	.4710	.9234	.2403-01	.1501-01	2.251	14.98	585.3
29	11.250	.45500	667.00	.2916	.3869	.4683	.9234	.2389-01	.1488-01	2.221	14.77	586.0
29	11.250	.46000	668.00	.2611	.3442	.4142	.9234	.2113-01	.1332-01	2.030	13.56	582.9
29	11.250	.47000	669.00	.2292	.2989	.3564	.9234	.1819-01	.1170-01	1.845	12.40	577.5
29	11.250	.48000	670.00	.1967	.2551	.3030	.9234	.1546-01	.1004-01	1.611	10.84	574.8
29	11.250	.49000	671.00	.1910	.2462	.2910	.9234	.1485-01	.9743-02	1.596	10.72	571.5
29	11.250	.50000	672.00	.1911	.2478	.2941	.9234	.1501-01	.9751-02	1.568	10.75	574.5
29	11.250	.70000	674.00	.5860-01	.7260-01	.8310-01	.9234	.4238-02	.2990-02	.5710	3.892	544.2
29	11.250	.85000	676.00	.1271	.1593	.1842	.9234	.9398-02	.6483-02	1.177	7.454	553.8
29	11.250	.86000	677.00	.1528	.1929	.2242	.9234	.1144-01	.7795-02	1.378	8.757	558.5
29	11.250	.87000	678.00	.1693	.2153	.2516	.9234	.1284-01	.8638-02	1.487	9.508	563.2
29	11.250	.88000	679.00	.1846	.2377	.2806	.9234	.1432-01	.9420-02	1.551	9.997	570.7
29	11.250	.90000	681.00	.2182	.2879	.3467	.9234	.1769-01	.1114-01	1.692	11.20	583.3
29	11.250	.91000	682.00	.2010	.2693	.3285	.9234	.1676-01	.1026-01	1.488	10.62	590.2
29	11.250	.92600	683.00	.6192	.9515	1.331	.9234	.6792-01	.3159-01	3.325	23.36	630.0
29	11.250	.95000	684.00	.4610-01	.5730-01	.6580-01	.9234	.3356-02	.2351-02	.4420	3.193	547.2
29	17.000	.33000	685.00	.8060-01	.9980-01	.1141	.9238	.5824-02	.4111-02	.7830	5.270	544.7
29	17.000	.34000	686.00	.8510-01	.1056	.1208	.9238	.6161-02	.4344-02	.8250	5.553	545.2
29	17.000	.35000	687.00	.1103	.1378	.1586	.9238	.8093-02	.5625-02	1.034	6.934	551.5
54	17.000	.35500	2102.0	.1167	.1443	.1649	.9237	.8400-02	.5944-02	1.159	7.562	552.5
29	17.000	.36000	688.00	.9870-01	.1227	.1406	.9238	.7173-02	.5036-02	.9470	6.365	547.2
29	17.000	.37000	689.00	.7650-01	.9420-01	.1072	.9238	.5471-02	.3901-02	.7620	5.142	539.9
29	17.000	.37500	690.00	.6970-01	.8550-01	.9700-01	.9238	.4947-02	.3557-02	.7100	4.811	535.8
54	17.000	.42500	2171.0	.1875	.2442	.2903	.9237	.1479-01	.9553-02	1.537	9.662	586.5
54	17.000	.43000	2176.0	.1799	.2362	.2827	.9237	.1440-01	.9166-02	1.437	9.142	590.7
27	17.000	.50000	691.00	.2602	.3371	.3990	.9238	.2035-01	.1327-01	2.156	14.26	578.7
27	17.000	.60000	692.00	.8440-01	.1036	.1176	.9238	.5998-02	.4303-02	.8600	5.562	541.2
27	17.000	.70000	693.00	.6670-01	.8250-01	.9420-01	.9238	.4806-02	.3400-02	.6560	4.449	548.0
27	17.000	.80000	694.00	.6810-01	.8340-01	.9460-01	.9238	.4824-02	.3472-02	.7000	4.415	539.5
54	20.980	.36000	2099.0	.1090	.1327	.1496	.9240	.7621-02	.5551-02	1.161	7.675	538.3
54	20.980	.36500	2100.0	.9070-01	.1095	.1228	.9240	.6257-02	.4619-02	1.003	6.656	530.4
54	23.070	.35500	2094.0	.1547	.1920	.2194	.9241	.1118-01	.7882-02	1.516	9.936	555.1
54	23.070	.36000	2095.0	.1261	.1540	.1740	.9241	.8863-02	.6427-02	1.326	8.755	541.1
54	23.070	.36500	2096.0	.9100-01	.1100	.1233	.9241	.6279-02	.4638-02	1.007	6.682	530.4
53	23.070	.43500	2000.0	.1666	.2127	.2483	.9241	.1266-01	.8496-02	1.465	9.260	575.3
53	23.070	.56890	2001.0	.1031	.1282	.1467	.9241	.7484-02	.5253-02	1.002	6.826	557.1
53	23.070	.70270	2002.0	.8150-01	.1005	.1143	.9241	.5829-02	.4157-02	.8230	5.857	549.9
53	23.070	.83500	2003.0	.1264	.1559	.1772	.9241	.9038-02	.6449-02	1.278	8.110	549.7
53	23.070	.90000	2004.0	.1378	.1757	.2050	.9241	.1045-01	.7028-02	1.218	8.073	574.5

IH72. OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT14)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
54	23.070	.92600	2154.0	.3849	.5270	.6516	.9241	.3320-01	.1961-01	2.718	18.79	608.9
27	29.800	.70000-01	700.00	.4406	.5516	.5174	.9631	.2639-01	.2247-01	4.138	27.84	557.0
27	29.800	.10000+00	701.00	.3689	.4562	.4491	.9534	.2290-01	.1882-01	3.646	23.23	547.4
27	29.800	.15000	702.00	.2151	.2641	.2771	.9397	.1413-01	.1097-01	2.190	15.71	541.5
27	29.800	.20000	703.00	.1071	.1297	.1419	.9296	.7236-02	.5465-02	1.164	7.828	528.1
27	29.800	.30000	704.00	.8890-01	.1099	.1249	.9245	.6371-02	.4536-02	.8820	6.248	546.7
27	29.800	.35000	705.00	.1354	.1701	.1958	.9245	.9986-02	.6906-02	1.253	8.523	559.6
54	29.800	.35500	2090.0	.1883	.2378	.2747	.9245	.1400-01	.9595-02	1.723	11.22	567.9
54	29.800	.36500	2092.0	.1477	.1844	.2112	.9245	.1076-01	.7524-02	1.412	9.209	559.7
54	29.800	.37000	2093.0	.1019	.1257	.1427	.9245	.7272-02	.5192-02	1.025	6.733	550.1
29	29.800	.50000	707.00	.1649	.2111	.2463	.9245	.1257-01	.8412-02	1.413	9.575	567.3
29	29.800	.60000	708.00	.1295	.1613	.1843	.9245	.9405-02	.6609-02	1.234	7.861	548.5
29	29.800	.70000	709.00	.8790-01	.1089	.1240	.9245	.6325-02	.4487-02	.8570	5.473	544.2
29	29.800	.80000	710.00	.1136	.1401	.1589	.9245	.8108-02	.5797-02	1.129	7.061	540.5
54	31.430	.44000	2166.0	.2747	.3647	.4378	.9245	.2230-01	.1399-01	2.118	13.73	596.1
53	31.430	.47600	2005.0	.1903	.2450	.2869	.9245	.1463-01	.9707-02	1.627	10.63	580.2
53	31.430	.51100	2006.0	.1510	.1914	.2216	.9245	.1130-01	.7702-02	1.365	9.232	570.6
53	31.430	.54600	2007.0	.1630	.2068	.2395	.9245	.1221-01	.8313-02	1.469	10.18	571.1
53	31.430	.61600	2009.0	.1580	.1989	.2291	.9245	.1168-01	.8060-02	1.466	9.941	565.9
53	31.430	.65000	2010.0	.1372	.1698	.1933	.9245	.9858-02	.6995-02	1.359	9.415	553.5
53	31.430	.68600	2014.0	.1067	.1325	.1511	.9245	.7704-02	.5440-02	1.045	7.253	555.8
53	31.430	.72050	2015.0	.6530-01	.8050-01	.9140-01	.9245	.4659-02	.3330-02	.6590	4.878	550.0
53	31.430	.79040	2017.0	.1428	.1763	.2003	.9245	.1021-01	.7280-02	1.430	9.020	551.3
53	31.430	.86000	2019.0	.1800-01	.2190-01	.2470-01	.9245	.1258-02	.9176-03	.1910	1.238	539.3
53	31.430	.89520	2020.0	.1256	.1585	.1829	.9245	.9329-02	.6408-02	1.155	7.434	567.6
54	31.430	.92600	2153.0	.3002	.4036	.4895	.9246	.2494-01	.1529-01	2.229	15.82	601.7
53	33.750	.25000	2079.0	.8890-01	.1109	.1268	.9246	.6468-02	.4534-02	.8540	6.968	559.4
53	33.750	.30000	2080.0	.1123	.1395	.1590	.9246	.8106-02	.5728-02	1.100	7.207	555.8
53	33.750	.37500	2081.0	.1152	.1433	.1635	.9246	.8339-02	.5876-02	1.121	7.404	557.1
53	33.750	.40000	2082.0	.2252	.3006	.3619	.9246	.1846-01	.1149-01	1.713	11.09	598.6
53	33.750	.45000	2084.0	.2107	.2723	.3197	.9246	.1631-01	.1074-01	1.775	11.58	582.6
53	33.750	.60000	2085.0	.1496	.1864	.2129	.9246	.1086-01	.7628-02	1.445	9.541	558.4
54	33.750	.65000	2086.0	.1405	.1734	.1969	.9247	.1003-01	.7156-02	1.407	9.406	550.9
54	33.750	.92600	2152.0	.2320	.3088	.3711	.9247	.1891-01	.1182-01	1.776	12.63	597.2
53	36.320	.25000	2066.0	.2206	.2871	.3386	.9248	.1727-01	.1125-01	1.817	11.83	586.3
53	36.320	.30000	2067.0	.1038	.1296	.1482	.9248	.7558-02	.5293-02	.9940	6.496	560.1
53	36.320	.35000	2069.0	.1099	.1372	.1568	.9248	.7998-02	.5603-02	1.052	6.943	559.9
53	36.320	.37500	2070.0	.1132	.1412	.1613	.9248	.8227-02	.5771-02	1.088	7.178	559.3
53	36.320	.40000	2071.0	.2168	.2824	.3332	.9248	.1699-01	.1106-01	1.780	11.59	586.8
53	36.320	.42000	2072.0	.2285	.3038	.3725	.9220	.1900-01	.1165-01	1.758	11.39	596.9
53	36.320	.42500	2073.0	.2235	.2980	.3584	.9248	.1828-01	.1140-01	1.703	11.02	598.3
53	36.320	.43000	2074.0	.2314	.3035	.3602	.9248	.1837-01	.1180-01	1.856	12.06	590.5
53	36.320	.43500	2075.0	.2438	.3254	.3916	.9248	.1997-01	.1243-01	1.852	11.99	598.8

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT14)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
53	36.320	.60000	2077.0	.1527	.1901	.2170	.9248	.1107-01	.7785-02	1.477	9.840	558.1
53	36.320	.65000	2078.0	.1168	.1462	.1675	.9248	.8543-02	.5958-02	1.108	7.526	561.9
29	37.700	.50000-01	715.00	.4676	.5882	.5294	.9715	.2701-01	.2386-01	4.279	27.79	555.9
29	37.700	.70000-01	716.00	.5662	.7264	.6717	.9644	.3427-01	.2889-01	4.815	32.50	568.6
29	37.700	.10000+00	717.00	.3861	.4790	.4687	.9545	.2392-01	.1970-01	3.735	24.24	545.7
29	37.700	.15000	718.00	.2426	.2997	.3135	.9406	.1600-01	.1238-01	2.389	17.53	542.3
29	37.700	.20000	719.00	.1194	.1449	.1582	.9303	.8071-02	.6093-02	1.274	8.681	526.1
29	37.700	.30000	720.00	.8160-01	.1013	.1152	.9249	.5878-02	.4163-02	.7880	5.640	546.0
27	37.700	.35000	721.00	.9790-01	.1210	.1373	.9248	.7001-02	.4995-02	.9710	6.732	546.7
27	37.700	.37500	722.00	.1204	.1500	.1712	.9248	.8730-02	.6143-02	1.155	7.976	553.2
27	37.700	.50000	723.00	.1261	.1558	.1768	.9248	.9015-02	.6431-02	1.250	8.635	546.8
27	37.700	.60000	724.00	.1668	.2052	.2320	.9248	.1183-01	.8508-02	1.686	10.80	543.0
27	37.700	.70000	725.00	.9530-01	.1175	.1331	.9248	.6789-02	.4860-02	.9530	6.063	545.0
27	37.700	.80000	726.00	.8650-01	.1060	.1196	.9248	.6098-02	.4414-02	.8900	5.613	539.5
27	37.700	.87000	727.00	.1411	.1778	.2045	.9248	.1043-01	.7197-02	1.292	8.202	561.5
27	37.700	.92600	728.00	.1615	.2100	.2474	.9248	.1262-01	.8239-02	1.323	9.454	580.6
28	39.000	.10000-01	993.00	.6342	.8514	.7051	.9803	.3604-01	.3241-01	4.711	33.41	596.2
28	39.000	.25000-01	994.00	.4449	.5572	.4855	.9793	.2481-01	.2274-01	4.182	28.30	557.6
53	45.000	.25000	2036.0	.6400-01	.7880-01	.8900-01	.9251	.4539-02	.3264-02	.6510	5.262	548.4
53	45.000	.32500	2038.0	.8760-01	.1084	.1229	.9251	.6265-02	.4470-02	.8740	5.965	552.3
53	45.000	.35000	2039.0	.9560-01	.1184	.1343	.9251	.6848-02	.4875-02	.9480	6.370	553.3
53	45.000	.37500	2040.0	.1139	.1415	.1609	.9251	.8203-02	.5808-02	1.114	7.476	556.0
53	45.000	.40000	2041.0	.1542	.1948	.2241	.9251	.1143-01	.7864-02	1.413	9.422	568.2
53	45.000	.42000	2042.0	.1419	.1791	.2060	.9251	.1051-01	.7234-02	1.301	8.680	567.9
53	45.000	.42500	2043.0	.1413	.1787	.2059	.9251	.1050-01	.7204-02	1.285	8.568	569.4
53	45.000	.43000	2044.0	.1434	.1820	.2101	.9251	.1071-01	.7314-02	1.291	8.596	571.3
53	45.000	.43500	2045.0	.1407	.1787	.2064	.9251	.1053-01	.7176-02	1.263	8.408	571.8
53	45.000	.44000	2046.0	.1371	.1738	.2004	.9251	.1022-01	.6993-02	1.240	8.260	570.5
53	45.000	.45000	2047.0	.1305	.1657	.1915	.9251	.9765-02	.6655-02	1.170	7.840	571.9
53	45.000	.47000	2048.0	.1027	.1301	.1500	.9251	.7651-02	.5239-02	.9310	6.298	570.1
53	45.000	.55000	2049.0	.7730-01	.9550-01	.1081	.9251	.5515-02	.3943-02	.7750	5.310	551.2
53	45.000	.60000	2050.0	.1192	.1477	.1677	.9251	.8550-02	.6077-02	1.177	7.907	554.1
53	45.000	.65000	2051.0	.1215	.1507	.1713	.9251	.8735-02	.6194-02	1.192	7.909	555.3
53	45.000	.75000	2052.0	.9020-01	.1110	.1255	.9251	.6401-02	.4598-02	.9140	5.806	548.9
53	45.000	.80000	2053.0	.9130-01	.1125	.1272	.9251	.6487-02	.4658-02	.9260	5.811	549.1
53	45.000	.83000	2054.0	.1038	.1285	.1458	.9251	.7437-02	.5291-02	1.027	6.414	553.7
53	45.000	.84000	2055.0	.1532	.1917	.2191	.9251	.1117-01	.7812-02	1.454	9.044	561.7
53	45.000	.85000	2056.0	.1449	.1806	.2058	.9251	.1049-01	.7389-02	1.399	8.839	558.5
53	45.000	.86000	2057.0	.9630-01	.1191	.1350	.9251	.6886-02	.4910-02	.9580	6.216	552.6
53	45.000	.87000	2058.0	.1181	.1461	.1656	.9251	.8443-02	.6024-02	1.178	7.822	552.3
53	45.000	.89000	2060.0	.1431	.1782	.2029	.9251	.1035-01	.7300-02	1.388	9.225	557.6
53	45.000	.90000	2061.0	.1269	.1577	.1795	.9251	.9152-02	.6472-02	1.238	8.256	556.5
53	45.000	.91000	2062.0	.7120-01	.8870-01	.1011	.9251	.5154-02	.3633-02	.6890	5.607	558.0

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
53	45.000	.92600	2063.0	.1127	.1444	.1679	.9251	.8563-02	.5746-02	.9780	6.804	577.5
53	45.000	.93500	2064.0	.1037	.1366	.1623	.9251	.8276-02	.5289-02	.8210	5.989	592.6
53	45.000	.94500	2065.0	.1047	.1312	.1502	.9251	.7658-02	.5342-02	.9890	6.517	562.6
27	180.00	.15000-01	2182.0	.5113	.6713	.6512	.9549	.3322-01	.2608-01	4.055	29.89	585.6
27	180.00	.20000-01	2183.0	.4179	.5268	.5161	.9540	.2632-01	.2131-01	3.821	28.80	561.8
27	180.00	.25000-01	2184.0	.3918	.4873	.4781	.9540	.2438-01	.1998-01	3.778	27.49	552.0
27	180.00	.30000-01	2185.0	.2226	.2748	.2700	.9538	.1377-01	.1135-01	2.216	16.07	545.9
27	180.00	.40000-01	737.00	.3345	.4122	.4115	.9503	.2099-01	.1706-01	3.353	21.90	544.6
27	180.00	.45000-01	738.00	.3317	.4083	.4108	.9487	.2095-01	.1692-01	3.340	22.15	543.7
27	180.00	.60000-01	739.00	.2611	.3196	.3284	.9441	.1675-01	.1332-01	2.695	18.19	538.7
27	180.00	.70000-01	740.00	.2390	.2924	.3043	.9412	.1552-01	.1219-01	2.475	16.81	538.1
27	180.00	.80000-01	741.00	.1962	.2394	.2520	.9386	.1285-01	.1001-01	2.059	15.05	535.4
27	180.00	.10000+00	742.00	.1519	.1843	.1980	.9339	.1010-01	.7747-02	1.631	10.99	530.6
27	180.00	.12500	743.00	.1161	.1407	.1544	.9292	.7876-02	.5919-02	1.250	9.168	529.9
27	180.00	.15000	744.00	.9020-01	.1093	.1218	.9256	.6215-02	.4600-02	.9760	6.844	529.0
27	180.00	.17500	745.00	.7690-01	.9310-01	.1050	.9233	.5353-02	.3921-02	.8340	6.323	528.6
27	180.00	.20000	746.00	.6570-01	.7940-01	.8980-01	.9221	.4581-02	.3349-02	.7190	5.193	526.6
27	180.00	.21500	747.00	.3490-01	.4260-01	.4850-01	.9220	.2475-02	.1781-02	.3670	2.562	534.8
27	180.00	.23000	748.00	.2770-01	.3390-01	.3860-01	.9220	.1970-02	.1415-02	.2900	2.158	535.9
27	180.00	.24000	749.00	.1650-01	.2020-01	.2300-01	.9220	.1175-02	.8408-03	.1710	1.293	538.1
27	180.00	.30000	751.00	.2160-01	.2650-01	.3030-01	.9220	.1546-02	.1103-02	.2230	1.467	539.2
27	180.00	.35000	752.00	.2360-01	.2880-01	.3300-01	.9220	.1681-02	.1203-02	.2450	1.556	537.5
27	180.00	.40000	753.00	.2080-01	.2540-01	.2900-01	.9220	.1479-02	.1059-02	.2160	1.393	537.4
27	180.00	.50000	754.00	.3420-01	.4190-01	.4790-01	.9220	.2445-02	.1742-02	.3510	2.302	539.9
27	180.00	.60000	755.00	.2640-01	.3240-01	.3710-01	.9220	.1894-02	.1347-02	.2700	1.734	541.0
27	180.00	.70000	756.00	.2710-01	.3320-01	.3800-01	.9220	.1937-02	.1382-02	.2780	1.845	539.6
27	180.00	.80000	757.00	.1220-01	.1490-01	.1710-01	.9220	.8706-03	.6233-03	.1270	.7990	537.6
27	235.00	.22000	759.00	.1310-01	.1600-01	.1840-01	.9220	.9362-03	.6667-03	.1340	1.000	540.3
27	235.00	.30000	762.00	.3040-01	.3720-01	.4260-01	.9220	.2170-02	.1550-02	.3140	1.894	538.8
27	235.00	.32000	763.00	.2520-01	.3090-01	.3530-01	.9220	.1800-02	.1285-02	.2590	1.540	539.3
27	235.00	.34000	764.00	.2620-01	.3220-01	.3690-01	.9220	.1880-02	.1338-02	.2680	1.595	540.7
27	235.00	.36000	765.00	.2350-01	.2900-01	.3340-01	.9220	.1704-02	.1198-02	.2330	1.403	546.4
27	235.00	.38000	766.00	.2240-01	.2780-01	.3210-01	.9220	.1637-02	.1142-02	.2180	1.325	549.9
29	247.00	.23000	768.00	.1130-01	.1390-01	.1590-01	.9220	.8110-03	.5783-03	.1160	.8650	535.4
29	247.00	.30000	772.00	.2840-01	.3510-01	.4050-01	.9220	.2066-02	.1451-02	.2790	1.711	542.7
29	247.00	.31000	773.00	.3590-01	.4440-01	.5120-01	.9220	.2611-02	.1832-02	.3520	2.137	543.2
29	247.00	.32000	774.00	.4490-01	.5580-01	.6460-01	.9220	.3294-02	.2293-02	.4330	2.604	546.4
29	247.00	.32500	775.00	.4990-01	.6210-01	.7210-01	.9220	.3678-02	.2544-02	.4730	2.849	549.3
29	247.00	.33000	776.00	.4990-01	.6240-01	.7270-01	.9220	.3710-02	.2544-02	.4640	2.796	552.9
29	247.00	.33500	777.00	.5820-01	.7320-01	.8560-01	.9220	.4369-02	.2968-02	.5310	3.195	556.4
29	247.00	.34000	778.00	.5490-01	.6910-01	.8080-01	.9220	.4123-02	.2801-02	.5010	3.015	556.4
29	247.00	.34500	779.00	.5820-01	.7330-01	.8570-01	.9220	.4375-02	.2970-02	.5300	3.198	556.7
29	247.00	.35000	780.00	.6660-01	.8360-01	.9740-01	.9220	.4970-02	.3400-02	.6170	3.740	553.7

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT14)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
29	247.00	.35500	781.00	.5680-01	.7130-01	.8330-01	.9220	.4248-02	.2897-02	.5220	3.171	555.0
27	247.00	.36000	782.00	.6690-01	.8390-01	.9780-01	.9220	.4989-02	.3411-02	.6230	3.777	558.4
27	247.00	.36500	783.00	.6150-01	.7680-01	.8930-01	.9220	.4554-02	.3137-02	.5830	3.528	555.3
27	247.00	.37000	784.00	.5650-01	.7020-01	.8130-01	.9220	.4146-02	.2881-02	.5460	3.329	551.6
27	247.00	.37500	785.00	.4230-01	.5240-01	.6050-01	.9220	.3085-02	.2157-02	.4140	2.551	549.0
27	247.00	.38000	786.00	.4140-01	.5110-01	.5880-01	.9220	.2999-02	.2109-02	.4110	2.540	546.3
27	247.00	.39000	787.00	.3520-01	.4320-01	.4950-01	.9220	.2526-02	.1794-02	.3570	2.221	541.8
28	247.00	.40000	788.00	.2620-01	.3210-01	.3670-01	.9220	.1874-02	.1337-02	.2690	1.689	539.6
28	247.00	.50000	789.00	.1730-01	.2100-01	.2390-01	.9220	.1219-02	.8848-03	.1870	1.206	530.6
28	247.00	.60000	790.00	.2860-01	.3500-01	.4000-01	.9220	.2043-02	.1462-02	.2970	1.959	538.2
28	247.00	.70000	791.00	.4590-01	.5640-01	.6470-01	.9220	.3307-02	.2345-02	.4660	3.300	542.7
28	247.00	.80000	792.00	.4120-01	.5060-01	.5790-01	.9220	.2960-02	.2106-02	.4220	2.663	540.9
28	247.00	.90000	793.00	.2350-01	.2910-01	.3370-01	.9220	.1722-02	.1199-02	.2280	1.468	551.2
54	247.00	.92600	2144.0	.4630-01	.5960-01	.7090-01	.9220	.3610-02	.2361-02	.3980	2.738	579.0
54	247.00	.93000	2149.0	.4330-01	.5620-01	.6750-01	.9220	.3437-02	.2206-02	.3590	2.545	584.7
54	250.57	.92600	2143.0	.5220-01	.6750-01	.8070-01	.9220	.4111-02	.2659-02	.4390	3.016	582.4
54	250.57	.93000	2148.0	.7500-01	.9810-01	.1186	.9220	.6043-02	.3821-02	.6060	4.191	588.9
54	250.57	.93700	2087.0	.2863	.4134	.5502	.9220	.2803-01	.1459-01	1.773	12.15	625.9
28	258.00	.29000	795.00	.2630-01	.3230-01	.3710-01	.9220	.1895-02	.1343-02	.2660	1.645	543.1
52	258.00	.32000	798.00	.9000-01	.1158	.1380	.9220	.7047-02	.4597-02	.7750	4.588	583.0
52	258.00	.34000	802.00	.9650-01	.1246	.1489	.9220	.7605-02	.4929-02	.8210	4.871	585.0
52	258.00	.34500	803.00	.1051	.1341	.1586	.9220	.8097-02	.5367-02	.9330	5.569	577.7
52	258.00	.35500	805.00	.1254	.1581	.1851	.9220	.9455-02	.6404-02	1.164	6.972	569.9
52	258.00	.36000	806.00	.8920-01	.1123	.1313	.9220	.6704-02	.4555-02	.8330	5.010	568.6
52	258.00	.36500	807.00	.6020-01	.7590-01	.8880-01	.9220	.4534-02	.3075-02	.5600	3.375	569.4
52	258.00	.37000	808.00	.4120-01	.5160-01	.6000-01	.9220	.3065-02	.2104-02	.3940	2.384	564.5
52	258.00	.37500	809.00	.3240-01	.4020-01	.4650-01	.9220	.2373-02	.1653-02	.3190	1.941	558.4
52	258.00	.38000	810.00	.2840-01	.3490-01	.4010-01	.9220	.2046-02	.1449-02	.2910	1.786	550.6
28	258.00	.40000	812.00	.9100-02	.1110-01	.1260-01	.9220	.6421-03	.4661-03	.9800-01	.6110	530.4
54	258.00	.93500	2151.0	.7920-01	.1017	.1209	.9220	.6161-02	.4037-02	.6830	4.747	578.3
28	270.00	.40000-01	985.00	.3279	.4051	.4154	.9447	.2123-01	.1676-01	3.261	21.21	546.9
28	270.00	.50000-01	986.00	.2947	.3668	.3823	.9417	.1954-01	.1506-01	2.840	19.31	553.0
28	270.00	.60000-01	987.00	.2530	.3146	.3326	.9389	.1700-01	.1293-01	2.450	16.08	552.1
28	270.00	.70000-01	988.00	.2110	.2629	.2818	.9363	.1440-01	.1079-01	2.029	13.59	553.5
28	270.00	.80000-01	989.00	.1793	.2226	.2413	.9340	.1233-01	.9166-02	1.748	12.36	550.8
28	270.00	.10000+00	990.00	.1494	.1833	.2016	.9299	.1031-01	.7634-02	1.530	10.01	541.1
28	270.00	.15000	991.00	.1069	.1307	.1482	.9235	.7573-02	.5463-02	1.112	8.205	537.9
28	270.00	.20000	992.00	.1499	.1820	.2067	.9220	.1057-01	.7661-02	1.611	10.98	531.2
28	270.00	.23000	813.00	.1430-01	.1750-01	.2000-01	.9220	.1025-02	.7333-03	.1490	1.089	538.1
28	270.00	.24000	814.00	.7400-02	.9000-02	.1030-01	.9220	.5264-03	.3763-03	.7600-01	.6200	538.8
28	270.00	.29000	817.00	.1071	.1351	.1584	.9220	.8097-02	.5472-02	.9760	6.016	563.1
28	270.00	.30000	818.00	.1898	.2429	.2880	.9220	.1472-01	.9702-02	1.646	9.937	571.8
28	270.00	.31000	819.00	.2077	.2670	.3177	.9220	.1624-01	.1062-01	1.774	10.61	574.4

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT14)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
28	270.00	.32000	820.00	.2275	.2930	.3493	.9220	.1785-01	.1163-01	1.928	11.49	575.7
28	270.00	.32500	821.00	.2489	.3239	.3896	.9220	.1991-01	.1272-01	2.039	12.08	581.3
28	270.00	.33000	822.00	.1677	.2219	.2708	.9220	.1384-01	.8574-02	1.303	7.712	589.5
28	270.00	.33500	823.00	.1991	.2619	.3181	.9220	.1626-01	.1017-01	1.572	9.341	587.0
28	270.00	.34500	825.00	.4769	.6109	.7251	.9220	.3706-01	.2438-01	4.119	24.58	572.5
28	270.00	.35000	826.00	.2679	.3432	.4072	.9220	.2081-01	.1369-01	2.315	13.82	572.4
28	270.00	.36000	828.00	.2157	.2830	.3429	.9220	.1753-01	.1103-01	1.719	10.16	585.6
28	270.00	.37000	830.00	.1060-01	.1290-01	.1460-01	.9220	.7474-03	.5429-03	.1150	.7020	530.1
28	270.00	.37500	831.00	.5060-01	.6170-01	.7040-01	.9220	.3597-02	.2584-02	.5310	3.251	536.2
28	270.00	.38000	832.00	.4590-01	.5580-01	.6340-01	.9220	.3242-02	.2346-02	.4910	3.017	532.1
28	270.00	.39000	833.00	.4770-01	.5810-01	.6620-01	.9220	.3382-02	.2436-02	.5040	3.123	534.7
28	270.00	.40000	834.00	.4150-01	.5050-01	.5750-01	.9220	.2940-02	.2120-02	.4400	2.735	534.1
28	270.00	.50000	835.00	.3550-01	.4330-01	.4950-01	.9220	.2528-02	.1813-02	.3710	2.354	537.0
28	270.00	.60000	836.00	.7110-01	.8770-01	.1009	.9220	.5158-02	.3632-02	.7100	4.729	546.1
28	270.00	.70000	837.00	.4910-01	.6060-01	.6970-01	.9220	.3565-02	.2508-02	.4890	3.443	546.5
28	270.0	.80000	838.00	.4250-01	.5220-01	.5990-01	.9220	.3063-02	.2172-02	.4320	2.690	542.6
28	270.00	.90000	839.00	.2200-01	.2760-01	.3220-01	.9220	.1648-02	.1124-02	.2040	1.297	559.7
54	270.00	.92600	2141.0	.1478	.1985	.2458	.9220	.1252-01	.7529-02	1.101	7.332	601.3
54	270.00	.93000	2146.0	.1524	.2068	.2583	.9220	.1316-01	.7765-02	1.104	7.573	605.3
54	270.00	.93500	2150.0	.1257	.1644	.1986	.9220	.1012-01	.6403-02	1.017	7.036	588.6
54	289.43	.92600	2140.0	.1119	.1558	.1996	.9220	.1017-01	.5700-02	.7560	5.113	614.8
54	289.43	.93000	2145.0	.1677	.2494	.3427	.9220	.1746-01	.8546-02	.9760	6.667	633.3
28	292.50	.23000	840.00	.2060-01	.2530-01	.2890-01	.9220	.1479-02	.1055-02	.2130	1.722	539.8
28	292.50	.25000	841.00	.3000-02	.3600-02	.4100-02	.9220	.2120-03	.1532-03	.3200-01	.2490	533.0
28	292.50	.35000	845.00	.1532	.1949	.2299	.9220	.1175-01	.7831-02	1.358	8.235	568.1
28	292.50	.37000	846.00	.1213	.1514	.1758	.9220	.8985-02	.6199-02	1.156	7.097	555.0
28	292.50	.40000	847.00	.8240-01	.1008	.1153	.9220	.5894-02	.4209-02	.8520	5.328	539.2
28	292.50	.45000	848.00	.6430-01	.7850-01	.8950-01	.9220	.4575-02	.3286-02	.6750	4.264	536.2
28	292.50	.50000	849.00	.9880-01	.1222	.1408	.9220	.7198-02	.5048-02	.9780	6.282	547.9
28	292.50	.60000	851.00	.1195	.1492	.1733	.9220	.8860-02	.6107-02	1.137	7.586	555.3
28	292.50	.65000	852.00	.9120-01	.1137	.1319	.9220	.6741-02	.4660-02	.8730	5.916	554.2
28	292.50	.70000	853.00	.8300-01	.1037	.1205	.9220	.6159-02	.4241-02	.7880	5.503	555.8
28	292.50	.75000	854.00	.5420-01	.6700-01	.7730-01	.9220	.3949-02	.2770-02	.5370	3.478	547.8
28	292.50	.80000	855.00	.5210-01	.6430-01	.7400-01	.9220	.3781-02	.2665-02	.5220	3.400	545.5
54	292.50	.82000	2129.0	.7840-01	.9640-01	.1106	.9220	.5635-02	.3993-02	.7990	4.894	547.4
54	292.50	.83000	2130.0	.7890-01	.9720-01	.1118	.9220	.5694-02	.4020-02	.7970	4.919	549.2
54	292.50	.85000	2132.0	.7800-01	.9620-01	.1106	.9220	.5637-02	.3971-02	.7840	4.861	550.2
54	292.50	.86000	2133.0	.8110-01	.1003	.1155	.9220	.5886-02	.4133-02	.8090	4.986	551.8
54	292.50	.87000	2134.0	.9430-01	.1168	.1348	.9220	.6870-02	.4803-02	.9310	5.764	553.7
54	292.50	.88000	2135.0	.1037	.1289	.1493	.9220	.7607-02	.5283-02	1.008	6.233	556.7
54	292.50	.89000	2136.0	.1028	.1284	.1492	.9220	.7602-02	.5237-02	.9810	6.075	560.1
28	292.50	.90000	856.00	.6520-01	.8220-01	.9630-01	.9220	.4920-02	.3330-02	.5960	3.837	562.5
54	292.50	.92600	2138.0	.1006	.1332	.1628	.9220	.8292-02	.5127-02	.7830	5.350	594.7

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
54	292.50	.93000	2139.0	.1138	.1553	.1951	.9220	.9939-02	.5796-02	.8110	5.646	607.6
54	301.50	.82000	2116.0	.7660-01	.9430-01	.1083	.9220	.5519-02	.3901-02	.7760	4.751	548.6
54	301.50	.83000	2117.0	.7780-01	.9570-01	.1099	.9220	.5598-02	.3961-02	.7900	4.811	548.1
54	301.50	.83500	2118.0	.7750-01	.9560-01	.1099	.9220	.5597-02	.3950-02	.7830	4.727	549.3
54	301.50	.84000	2119.0	.7750-01	.9550-01	.1098	.9220	.5593-02	.3946-02	.7820	4.758	549.4
54	301.50	.85000	2120.0	.9500-01	.1172	.1348	.9220	.6869-02	.4840-02	.9550	5.828	550.1
54	301.50	.86000	2021.0	.1115	.1377	.1587	.9220	.8084-02	.5679-02	1.113	6.826	551.5
54	301.50	.87000	2122.0	.1009	.1243	.1428	.9220	.7276-02	.5142-02	1.022	6.258	548.7
54	301.50	.88000	2123.0	.7710-01	.9570-01	.1105	.9220	.5631-02	.3929-02	.7580	4.654	554.5
54	301.50	.89000	2124.0	.5240-01	.6530-01	.7580-01	.9220	.3860-02	.2668-02	.5040	3.111	558.7
54	301.50	.90000	2125.0	.2440-01	.3060-01	.3560-01	.9220	.1812-02	.1245-02	.2320	1.444	561.1
54	301.50	.92600	2127.0	.1041	.1340	.1597	.9220	.8134-02	.5304-02	.8890	5.477	579.9
54	301.50	.93500	2128.0	.1404	.1804	.2147	.9220	.1094-01	.7154-02	1.205	7.997	579.0
54	305.40	.82000	2113.0	.7550-01	.9260-01	.1060	.9220	.5398-02	.3847-02	.7800	4.762	544.6
54	305.40	.83000	2114.0	.8240-01	.1013	.1162	.9220	.5919-02	.4198-02	.8420	5.131	546.9
54	305.40	.83500	2115.0	.4780-01	.5950-01	.6900-01	.9220	.3515-02	.2435-02	.4620	2.824	557.7
28	305.40	.84000	857.00	.5600-01	.6960-01	.8050-01	.9220	.4113-02	.2864-02	.5450	3.362	551.1
52	305.40	.85000	858.00	.7060-01	.8710-01	.1002	.9220	.5118-02	.3607-02	.7160	4.435	553.1
52	305.40	.86000	859.00	.8980-01	.1107	.1272	.9220	.6498-02	.4586-02	.9130	5.708	552.4
52	305.40	.87000	860.00	.8000-01	.9860-01	.1134	.9220	.5791-02	.4087-02	.8140	5.103	552.3
52	305.40	.88000	861.00	.7030-01	.8670-01	.9970-01	.9220	.5093-02	.3588-02	.7120	4.459	553.2
52	305.40	.89000	862.00	.6520-01	.8120-01	.9420-01	.9220	.4810-02	.3332-02	.6360	3.989	560.8
52	305.40	.90000	863.00	.5580-01	.6980-01	.8110-01	.9220	.4144-02	.2850-02	.5350	3.375	563.7
52	305.40	.91000	864.00	.5050-01	.6340-01	.7400-01	.9220	.3778-02	.2581-02	.4780	3.437	566.6
52	305.40	.92600	865.00	.1399	.1806	.2158	.9220	.1102-01	.7147-02	1.192	8.477	584.7
52	309.30	.80000	866.00	.8330-01	.1027	.1180	.9220	.6028-02	.4253-02	.8470	5.307	552.5
52	309.30	.81000	867.00	.7210-01	.8890-01	.1022	.9220	.5221-02	.3681-02	.7320	4.560	552.8
52	309.30	.82000	868.00	.7610-01	.9370-01	.1078	.9220	.5504-02	.3884-02	.7740	4.823	552.3
52	309.30	.83000	869.00	.7180-01	.8890-01	.1026	.9220	.5240-02	.3666-02	.7150	4.461	556.4
52	315.00	.50000-01	871.00	.3660	.4548	.4547	.9501	.2322-01	.1869-01	3.599	22.87	559.0
52	315.00	.60000-01	872.00	.3569	.4423	.4490	.9469	.2293-01	.1823-01	3.546	23.43	557.0
28	315.00	.70000-01	873.00	.2412	.2958	.3041	.9440	.1554-01	.1233-01	2.474	16.88	540.8
28	315.00	.10000+00	875.00	.1940	.2371	.2525	.9363	.1291-01	.9915-02	2.021	13.33	537.7
28	315.00	.15000	876.00	.1030	.1260	.1402	.9271	.7168-02	.5266-02	1.073	7.888	537.8
28	315.00	.20000	877.00	.5480-01	.6650-01	.7530-01	.9225	.3849-02	.2802-02	.5920	4.022	530.3
28	315.00	.35000	878.00	.7680-01	.9440-01	.1083	.9220	.5537-02	.3925-02	.7800	4.856	542.8
28	315.00	.40000	879.00	.1830-01	.1990-01	.2080-01	.9220	.1064-02	.9369-03	.4520	3.353	258.9
28	315.00	.50000	880.00	.1110	.1389	.1616	.9220	.8262-02	.5671-02	1.046	7.147	557.0
28	315.00	.55000	881.00	.5520-01	.6870-01	.7970-01	.9220	.4071-02	.2822-02	.5320	3.532	553.0
28	315.00	.60000	882.00	.4410-01	.5450-01	.6290-01	.9220	.3217-02	.2252-02	.4340	2.915	548.7
28	315.00	.65000	883.00	.4130-01	.5110-01	.5890-01	.9220	.3010-02	.2112-02	.4090	2.792	547.7
28	315.00	.70000	884.00	.4630-01	.5720-01	.6590-01	.9220	.3370-02	.2365-02	.4590	3.259	547.6
28	315.00	.75000	885.00	.2740-01	.3370-01	.3860-01	.9220	.1974-02	.1401-02	.2790	1.765	542.1

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT14)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
28	315.00	.80000	886.00	.5830-01	.7160-01	.8220-01	.9220	.4201-02	.2978-02	.5920	3.725	542.9
28	315.00	.84000	887.00	.4630-01	.5750-01	.6650-01	.9220	.3398-02	.2365-02	.4500	2.823	551.2
52	315.00	.87000	890.00	.5750-01	.7140-01	.8270-01	.9220	.4223-02	.2936-02	.5640	3.565	559.3
52	315.00	.88000	891.00	.6870-01	.8590-01	.9380-01	.9220	.5097-02	.3511-02	.6610	4.194	563.2
52	315.00	.89000	892.00	.7110-01	.8900-01	.1037	.9220	.5297-02	.3630-02	.6760	4.358	565.3
52	315.00	.90000	893.00	.7270-01	.9180-01	.1078	.9220	.5504-02	.3711-02	.6680	4.341	571.6
52	315.00	.91000	894.00	.3740-01	.4720-01	.5520-01	.9220	.2821-02	.1911-02	.3470	2.505	569.8
52	315.00	.92600	895.00	.1015	.1315	.1576	.9220	.8046-02	.5184-02	.8540	6.089	586.7
52	322.30	.42000	897.00	.1670	.2093	.2440	.9220	.1246-01	.8528-02	1.584	10.09	565.8
52	322.30	.43500	898.00	.1300	.1627	.1894	.9220	.9670-02	.6638-02	1.241	7.684	564.6
52	322.30	.45000	899.00	.1057	.1324	.1543	.9220	.7879-02	.5396-02	1.004	6.508	565.5
52	322.30	.50000	900.00	.6920-01	.8720-01	.1021	.9220	.5216-02	.3534-02	.6420	4.230	569.8
52	322.30	.60000	901.00	.5130-01	.6400-01	.7430-01	.9220	.3795-02	.2620-02	.4960	3.269	562.2
54	324.45	.40500	2109.0	.1237	.1552	.1811	.9220	.9225-02	.6301-02	1.159	7.244	563.5
54	324.45	.41000	2110.0	.1214	.1528	.1787	.9220	.9103-02	.6186-02	1.125	7.027	565.5
54	324.45	.92600	2164.0	.8420-01	.1081	.1285	.9220	.6545-02	.4290-02	.7260	5.079	578.3
54	326.85	.40000	2107.0	.1226	.1522	.1759	.9220	.8961-02	.6247-02	1.203	7.548	555.0
54	326.85	.40500	2108.0	.1130	.1409	.1634	.9220	.6327-02	.5757-02	1.087	6.813	558.6
53	326.85	.44000	2021.0	.1602	.2017	.2361	.9220	.1204-01	.8168-02	1.482	9.329	566.4
53	326.85	.58100	2025.0	.5720-01	.7200-01	.8410-01	.9220	.4288-02	.2920-02	.5340	3.699	565.0
53	326.85	.61600	2026.0	.3150-01	.3950-01	.4600-01	.9220	.2345-02	.1606-02	.2970	2.051	562.7
53	326.85	.65200	2027.0	.3780-01	.4730-01	.5500-01	.9220	.2806-02	.1929-02	.3600	2.484	561.2
53	326.85	.68600	2028.0	.4440-01	.5540-01	.6430-01	.9220	.3278-02	.2265-02	.4280	2.965	558.9
53	326.85	.72260	2029.0	.2010-01	.2490-01	.2860-01	.9220	.1460-02	.1028-02	.2020	1.408	550.9
53	326.85	.75790	2030.0	.1490-01	.1830-01	.2100-01	.9220	.1068-02	.7622-03	.1550	.9930	544.3
53	326.85	.79310	2031.0	.6340-01	.7830-01	.9020-01	.9220	.4601-02	.3232-02	.6330	3.959	551.8
53	326.85	.82830	2032.0	.2650-01	.3270-01	.3770-01	.9220	.1921-02	.1354-02	.2670	1.687	550.3
53	326.85	.86350	2033.0	.6110-01	.7600-01	.8800-01	.9220	.4487-02	.3118-02	.5960	3.718	556.6
53	326.85	.90000	2034.0	.8570-01	.1078	.1259	.9220	.6419-02	.4373-02	.8000	4.927	564.8
54	326.85	.92600	2163.0	.1765	.2301	.2773	.9220	.1413-01	.8991-02	1.442	10.04	587.1
53	326.85	.93390	2035.0	.1791	.2374	.2903	.9220	.1480-01	.9135-02	1.391	9.100	595.5
54	330.20	.40000	2104.0	.1071	.1326	.1529	.9220	.7791-02	.5456-02	1.061	6.668	552.9
54	330.20	.40500	2105.0	.1062	.1318	.1523	.9220	.7760-02	.5411-02	1.042	6.540	554.9
54	330.20	.41000	2106.0	.1038	.1293	.1500	.9220	.7642-02	.5286-02	1.000	6.247	558.3
52	330.20	.42000	905.00	.1116	.1394	.1619	.9220	.8271-02	.5700-02	1.075	6.878	562.9
52	330.20	.43500	906.00	.1315	.1657	.1940	.9220	.9908-02	.6715-02	1.222	7.834	569.6
52	330.20	.45000	907.00	.1363	.1739	.2056	.9220	.1050-01	.6963-02	1.212	7.785	577.5
52	330.20	.50000	908.00	.6590-01	.8390-01	.9910-01	.9220	.5060-02	.3366-02	.5890	4.153	576.5
52	330.20	.60000	909.00	.6470-01	.8090-01	.9410-01	.9220	.4805-02	.3304-02	.6200	4.022	563.9
52	330.20	.70000	910.00	.4720-01	.5860-01	.6790-01	.9220	.3466-02	.2410-02	.4640	3.109	559.1
52	330.20	.80000	911.00	.2860-01	.3500-01	.4000-01	.9220	.2045-02	.1459-02	.2980	1.912	547.0
54	330.20	.92600	2162.0	.2089	.2738	.3314	.9220	.1688-01	.1064-01	1.679	11.65	589.7
54	334.98	.92600	2161.0	.2190	.2926	.3605	.9220	.1836-01	.1116-01	1.656	11.40	599.0

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
52	334.98	.93500	913.00	.1253	.1760	.2276	.9220	.1162-01	.6397-02	.8340	5.845	621.2
52	334.98	.94500	914.00	.6100-01	.7500-01	.8610-01	.9220	.4398-02	.3117-02	.6270	4.508	550.3
52	337.50	.40000-01	915.00	.4093	.5111	.4872	.9598	.2488-01	.2090-01	3.945	24.80	562.8
52	337.50	.50000-01	916.00	.3961	.4934	.4785	.9563	.2444-01	.2023-01	3.855	24.68	561.0
52	337.50	.70000-01	918.00	.3195	.3942	.3945	.9498	.2015-01	.1632-01	3.235	22.42	553.3
52	337.50	.80000-01	919.00	.2980	.3669	.3723	.9469	.1901-01	.1522-01	3.044	20.72	551.5
52	337.50	.10000+00	920.00	.2524	.3086	.3210	.9413	.1639-01	.1289-01	2.661	17.80	545.1
52	337.50	.15000	921.00	.1810	.2205	.2409	.9305	.1230-01	.9245-02	1.941	14.10	541.6
52	337.50	.20000	922.00	.1280	.1553	.1746	.9240	.8915-02	.6537-02	1.399	9.362	537.5
54	337.50	.42000	923.00	.1036	.1326	.1573	.9220	.8031-02	.5289-02	.9080	5.825	579.9
52	337.50	.42500	2167.0	.1118	.1414	.1660	.9220	.8458-02	.5695-02	1.016	6.478	569.1
52	337.50	.43500	924.00	.1013	.1273	.1486	.9220	.7589-02	.5171-02	.9510	6.158	567.7
52	337.50	.85000	926.00	.5490-01	.6790-01	.7820-01	.9220	.3995-02	.2806-02	.5520	3.556	554.8
52	337.50	.86000	927.00	.6920-01	.8570-01	.9890-01	.9220	.5050-02	.3536-02	.6910	4.462	556.1
52	337.50	.87000	928.00	.7050-01	.8780-01	.1018	.9220	.5197-02	.3599-02	.6860	4.431	560.9
52	337.50	.88000	929.00	.7080-01	.8640-01	.9860-01	.9220	.5033-02	.3618-02	.7540	4.942	543.2
52	337.50	.89000	930.00	.7910-01	.1005	.1184	.9220	.6045-02	.4042-02	.7150	4.638	574.8
52	337.50	.90000	931.00	.6180-01	.7920-01	.9400-01	.9220	.4800-02	.3157-02	.5400	3.583	580.4
52	337.50	.91000	932.00	.3480-01	.4470-01	.5320-01	.9220	.2719-02	.1777-02	.3010	2.162	582.3
28	337.50	.92600	933.00	.1712	.2323	.2901	.9220	.1483-01	.8752-02	1.234	8.766	600.5
28	343.12	.41500	934.00	.1255	.1574	.1833	.9222	.9371-02	.6416-02	1.175	7.574	558.4
28	343.12	.42000	935.00	.1404	.1777	.2085	.9222	.1065-01	.7177-02	1.269	8.230	564.7
28	343.12	.42500	936.00	.2202	.2880	.3477	.9222	.1777-01	.1125-01	1.771	11.41	584.1
28	343.12	.44000	938.00	.1900-02	.2900-02	.3900-02	.9222	.2001-03	.9952-04	.1100-01	.7200-01	626.7
28	343.12	.44500	939.00	.1088	.1392	.1648	.9222	.8423-02	.5559-02	.9440	6.191	571.7
28	343.12	.45000	940.00	.9190-01	.1168	.1376	.9222	.7034-02	.4699-02	.8170	5.370	567.6
28	343.12	.50000	941.00	.9990-01	.1260	.1474	.9222	.7535-02	.5106-02	.9150	6.156	562.4
28	343.12	.60000	942.00	.4980-01	.6180-01	.7140-01	.9222	.3648-02	.2547-02	.4870	3.136	550.2
28	343.12	.80000	944.00	.5060-01	.6230-01	.7160-01	.9222	.3658-02	.2585-02	.5090	3.322	544.7
54	345.56	.42500	2168.0	.2296	.3004	.3626	.9222	.1847-01	.1170-01	1.854	11.70	589.0
54	345.56	.92600	2160.0	.1913	.2595	.3239	.9221	.1650-01	.9745-02	1.385	9.500	605.4
28	348.00	.35000	945.00	.4680-01	.5730-01	.6550-01	.9223	.3348-02	.2392-02	.4830	3.072	539.6
28	348.00	.36000	946.00	.4360-01	.5340-01	.6110-01	.9223	.3121-02	.2226-02	.4470	2.853	540.6
28	348.00	.37000	947.00	.4330-01	.5310-01	.6070-01	.9223	.3105-02	.2212-02	.4430	2.834	541.1
52	348.00	.37500	948.00	.5070-01	.6240-01	.7150-01	.9223	.3654-02	.2591-02	.5200	3.311	550.7
52	348.00	.38000	949.00	.5790-01	.7130-01	.8180-01	.9223	.4179-02	.2955-02	.5890	3.775	552.3
52	348.00	.38500	950.00	.6600-01	.8150-01	.9370-01	.9223	.4786-02	.3373-02	.6670	4.285	553.8
52	348.00	.39000	951.00	.7210-01	.8920-01	.1028	.9223	.5247-02	.3681-02	.7200	4.648	556.0
52	348.00	.39500	952.00	.8510-01	.1056	.1219	.9223	.6224-02	.4348-02	.8430	5.358	557.8
52	348.00	.40000	953.00	.8260-01	.1025	.1184	.9223	.6048-02	.4217-02	.8140	5.262	558.6
52	348.00	.41000	955.00	.1164	.1465	.1710	.9223	.8732-02	.5946-02	1.088	7.022	568.6
52	348.00	.41500	956.00	.1380	.1754	.2064	.9223	.1054-01	.7049-02	1.242	8.013	575.3
52	348.00	.42000	957.00	.1746	.2237	.2650	.9223	.1353-01	.8918-02	1.527	9.854	580.3

IH72. OTS W/PROTUBERANCES. EXTERNAL TANK HI/HREF (RVZT14)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
52	348.00	.42500	958.00	.1752	.2255	.2682	.9223	.1370-01	.8948-02	1.507	9.711	583.2
52	348.00	.43000	959.00	.2804	.3778	.4679	.9223	.2390-01	.1432-01	2.087	13.26	605.8
52	348.00	.44000	960.00	.3064	.4083	.5005	.9223	.2556-01	.1565-01	2.356	15.05	601.0
52	348.00	.44500	961.00	.1765	.2297	.2757	.9223	.1408-01	.9013-02	1.463	9.399	589.3
52	348.00	.47000	965.00	.4580-01	.5800-01	.6800-01	.9223	.3473-02	.2339-02	.4190	2.752	572.6
52	348.00	.85000	968.00	.8890-01	.1103	.1273	.9223	.6499-02	.4538-02	.8780	5.665	558.0
52	348.00	.86000	969.00	.1003	.1258	.1464	.9223	.7475-02	.5124-02	.9510	6.130	565.9
53	348.00	.89000	972.00	.7330-01	.9370-01	.1108	.9223	.5652-02	.3736-02	.6410	4.191	576.4
53	348.00	.90000	973.00	.5740-01	.7400-01	.8800-01	.9223	.4489-02	.2928-02	.4890	3.272	580.7
53	348.00	.92600	975.00	.2192	.3073	.3956	.9223	.2017-01	.1118-01	1.456	10.19	617.5
54	352.20	.93700	2089.0	.5780-01	.7510-01	.9000-01	.9224	.4586-02	.2943-02	.4760	3.269	585.6
54	354.00	.42500	2169.0	.3250-01	.4000-01	.4580-01	.9225	.2332-02	.1656-02	.3310	2.132	547.7
54	354.00	.43000	2174.0	.1869	.2439	.2931	.9225	.1493-01	.9520-02	1.521	9.612	587.7
54	354.00	.43500	2177.0	.3075	.4152	.5142	.9225	.2620-01	.1567-01	2.257	14.15	603.4
54	354.00	.44000	2179.0	.3631	.4964	.6218	.9225	.3168-01	.1850-01	2.576	16.11	608.3
54	355.16	.92600	2158.0	.3221	.4770	.6479	.9226	.3301-01	.1641-01	1.888	12.99	632.4

EXTERNAL TANK

PARAMETRIC DATA

ALPHA = .0000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
9	.0000	-9.000	4.020	72.40	750.0	177.2	.4650	5.255	2622.	.2200-03	.1426-06	4.044
10	.0000	-9.100	4.020	72.50	749.0	176.9	.4650	5.260	2620.	.2205-03	.1425-06	4.055
11	.0000	-9.000	4.020	72.50	749.0	177.0	.4650	5.258	2620.	.2204-03	.1425-06	4.054
43	-.3000-01	-9.100	4.020	72.30	742.0	175.4	.4630	5.242	2609.	.2216-03	.1412-06	4.094
44	-.3000-01	-9.100	4.020	72.30	745.0	176.1	.4640	5.244	2614.	.2209-03	.1418-06	4.073
45	-.2000-01	-9.100	4.020	72.40	748.0	176.7	.4640	5.253	2618.	.2205-03	.1423-06	4.058

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
9	.5106-01	.1143-01
10	.5108-01	.1142-01
11	.5107-01	.1142-01
43	.5092-01	.1138-01
44	.5096-01	.1140-01
45	.5103-01	.1142-01

TEST DATA

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
10	.00000	.25000-01	2187.0	.4103	.5693	.5205	.9621	.2659-01	.2096-01	2.809	19.18	614.8
10	.00000	.30000-01	2188.0	.3824	.5189	.4782	.9619	.2442-01	.1953-01	2.779	19.17	606.6
9	.00000	.40000-01	600.00	.3816	.4952	.4720	.9583	.2410-01	.1948-01	3.184	20.07	586.3
9	.00000	.50000-01	601.00	.3462	.4503	.4377	.9548	.2235-01	.1767-01	2.864	18.10	587.7
9	.00000	.70000-01	603.00	.2665	.3412	.3444	.9484	.1758-01	.1361-01	2.328	15.64	578.6
9	.00000	.80000-01	604.00	.2493	.3170	.3251	.9454	.1660-01	.1273-01	2.235	14.34	574.2
9	.00000	.15000	606.00	.1101	.1352	.1491	.9296	.7613-02	.5621-02	1.135	8.245	547.9
9	.00000	.20000	607.00	.6380-01	.7740-01	.8730-01	.9235	.4457-02	.3259-02	.6950	4.559	536.5
9	.00000	.21000	608.00	.5490-01	.6710-01	.7640-01	.9229	.3902-02	.2801-02	.5740	3.969	544.9
9	.00000	.22000	609.00	.4650-01	.5690-01	.6490-01	.9224	.3314-02	.2373-02	.4860	3.623	544.8
9	.00000	.30000	610.00	.3940-01	.4820-01	.5510-01	.9220	.2813-02	.2013-02	.4130	2.834	544.3
9	.00000	.35000	611.00	.3910-01	.4760-01	.5420-01	.9220	.2765-02	.1999-02	.4210	2.819	538.9

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT15)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
9	.00000	.36000	612.00	.5510-01	.6730-01	.7690-01	.9220	.3928-02	.2813-02	.5800	3.903	543.6
9	.00000	.37000	613.00	.6940-01	.8540-01	.9820-01	.9220	.5013-02	.3542-02	.7060	4.736	550.5
9	.00000	.37500	614.00	.6390-01	.7860-01	.9020-01	.9220	.4604-02	.3264-02	.6560	4.403	548.8
11	.00000	.38000	615.00	.6150-01	.7550-01	.8660-01	.9220	.4423-02	.3140-02	.6320	4.249	547.5
11	.00000	.38500	616.00	.5840-01	.7170-01	.8220-01	.9220	.4197-02	.2980-02	.6000	4.033	547.5
11	.00000	.39500	618.00	.6510-01	.8090-01	.9360-01	.9220	.4781-02	.3325-02	.6370	4.275	557.2
11	.00000	.40000	619.00	.7350-01	.9180-01	.1067	.9220	.5450-02	.3755-02	.7050	4.692	561.1
11	.00000	.40500	620.00	.7950-01	.9910-01	.1150	.9220	.5873-02	.4061-02	.7690	5.133	559.6
11	.00000	.41000	621.00	.9660-01	.1217	.1425	.9220	.7279-02	.4931-02	.8930	5.937	567.8
11	.00000	.41500	622.00	.1175	.1494	.1762	.9220	.8997-02	.5999-02	1.052	6.954	573.6
11	.00000	.43000	625.00	.1756	.2284	.2748	.9220	.1403-01	.8965-02	1.450	9.553	587.1
11	.00000	.44000	626.00	.2027	.2682	.3274	.9220	.1672-01	.1035-01	1.589	10.42	595.4
11	.00000	.44500	627.00	.1954	.2579	.3142	.9220	.1604-01	.9976-02	1.541	10.21	594.4
11	.00000	.45000	628.00	.1748	.2269	.2724	.9220	.1391-01	.8929-02	1.456	9.688	585.8
11	.00000	.45500	629.00	.1579	.2026	.2407	.9220	.1229-01	.8063-02	1.359	9.275	579.1
9	.00000	.46000	630.00	.1371	.1768	.2110	.9220	.1077-01	.7000-02	1.169	7.718	582.7
9	.00000	.47000	631.00	.1084	.1374	.1617	.9220	.8256-02	.5533-02	.9810	6.508	572.5
9	.00000	.48000	632.00	.9030-01	.1138	.1331	.9220	.6797-02	.4613-02	.8400	5.618	567.8
9	.00000	.49000	633.00	.8570-01	.1075	.1253	.9220	.6398-02	.4376-02	.8100	5.479	564.6
9	.00000	.50000	634.00	.8330-01	.1046	.1222	.9220	.6237-02	.4252-02	.7810	5.413	566.0
9	.00000	.55000	635.00	.7620-01	.9570-01	.1117	.9220	.5701-02	.3892-02	.7170	4.719	565.5
9	.00000	.60000	636.00	.8340-01	.1037	.1202	.9220	.6136-02	.4256-02	.8120	5.206	558.9
9	.00000	.65000	637.00	.1044	.1307	.1522	.9220	.7772-02	.5329-02	.9910	6.355	563.8
9	.00000	.70000	638.00	.8160-01	.1023	.1192	.9220	.6085-02	.4167-02	.7730	5.247	564.2
9	.00000	.75000	639.00	.6100-01	.7590-01	.8790-01	.9220	.4487-02	.3116-02	.5960	3.823	558.4
9	.00000	.80000	640.00	.7990-01	.9950-01	.1152	.9220	.5883-02	.4081-02	.7790	4.854	558.8
9	.00000	.85000	641.00	.6120-01	.7680-01	.8950-01	.9220	.4572-02	.3125-02	.5770	3.616	565.0
9	.00000	.87000	643.00	.1152	.1496	.1796	.9220	.9170-02	.5881-02	.9590	6.063	586.7
9	.00000	.88000	644.00	.1333	.1769	.2165	.9220	.1105-01	.6806-02	1.036	6.571	597.5
11	.00000	.95000	649.00	.7670-01	.9580-01	.1113	.9220	.5683-02	.3918-02	.7370	5.336	560.8
45	5.6250	.42500	2170.0	.1102	.1433	.1723	.9220	.8792-02	.5624-02	.9100	5.806	586.0
45	5.6250	.43000	2175.0	.1603	.2155	.2670	.9220	.1363-01	.8178-02	1.193	7.550	602.0
45	5.6250	.44000	2180.0	.1636	.2238	.2818	.9220	.1438-01	.8350-02	1.162	7.327	608.7
11	11.250	.35000	650.90	.4850-01	.5940-01	.6790-01	.9220	.3466-02	.2478-02	.5080	3.418	544.0
11	11.250	.36000	651.00	.7130-01	.8810-01	.1014	.9220	.5178-02	.3643-02	.7180	4.825	551.9
11	11.250	.37000	652.00	.7100-01	.8760-01	.1008	.9220	.5148-02	.3626-02	.7170	4.805	551.3
11	11.250	.38000	654.00	.6870-01	.8480-01	.9780-01	.9220	.4992-02	.3506-02	.6880	4.627	552.6
11	11.250	.39000	656.00	.6940-01	.8590-01	.9920-01	.9220	.5064-02	.3542-02	.6880	4.621	554.6
11	11.250	.39500	657.00	.7350-01	.9140-01	.1058	.9220	.5401-02	.3753-02	.7180	4.817	557.5
11	11.250	.40500	659.00	.8080-01	.1019	.1195	.9220	.6103-02	.4124-02	.7430	4.969	568.7
11	11.250	.41000	660.00	.8750-01	.1108	.1301	.9220	.6645-02	.4468-02	.7970	5.307	570.6
11	11.250	.41500	661.00	.9680-01	.1230	.1449	.9220	.7401-02	.4941-02	.8680	5.759	573.2
11	11.250	.42000	662.00	.1113	.1434	.1710	.9220	.8732-02	.5683-02	.9510	6.299	581.6

IH72. AEDC V41A-R2A. INTEGRATED VEHICLE HEATING RATES

IH72. OTS W/PROTUBERANCES. EXTERNAL TANK HI/HREF

(RVZT15)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
11	11.250	.42500	663.00	.1239	.1615	.1947	.9220	.9940-02	.6326-02	1.016	6.731	588.2
11	11.250	.43000	664.00	.1387	.1845	.2264	.9220	.1156-01	.7083-02	1.068	7.105	598.1
11	11.250	.44000	665.00	.1606	.2148	.2648	.9220	.1352-01	.8201-02	1.217	8.040	600.4
11	11.250	.45000	666.00	.1461	.1869	.2216	.9220	.1131-01	.7461-02	1.280	8.547	577.4
11	11.250	.45500	667.00	.1293	.164:	.1931	.9220	.9861-02	.6603-02	1.168	7.820	572.1
11	11.250	.46000	668.00	.1132	.1428	.1673	.9220	.8542-02	.5762-02	1.046	7.038	568.1
11	11.250	.47000	669.00	.8680-01	.1088	.1268	.9220	.6475-02	.4434-02	.8220	5.560	563.6
11	11.250	.48000	670.00	.8650-01	.1089	.1273	.9220	.6501-02	.4419-02	.8060	5.446	566.5
11	11.250	.49000	671.00	.1109	.1421	.1687	.9220	.8614-02	.5664-02	.9660	6.469	578.3
11	11.250	.50000	672.00	.1147	.1484	.1777	.9220	.9073-02	.5857-02	.9650	6.587	584.1
11	11.250	.70000	674.00	.6880-01	.8630-01	.1006	.9220	.5136-02	.3513-02	.6490	4.380	564.0
11	11.250	.85000	676.00	.7480-01	.9430-01	.1104	.9220	.5636-02	.3821-02	.6930	4.360	567.5
11	11.250	.86000	677.00	.9130-01	.1164	.1376	.9220	.7024-02	.4663-02	.8100	5.107	575.1
11	11.250	.87000	678.00	.1062	.1372	.1640	.9220	.8376-02	.5422-02	.8980	5.686	583.2
11	11.250	.88000	679.00	.1273	.1677	.2040	.9220	.1042-01	.6499-02	1.009	6.434	593.6
11	11.250	.90000	681.00	.1051	.1416	.1758	.9220	.8978-02	.5369-02	.7800	5.113	603.6
11	11.250	.91000	682.00	.5520-01	.7340-01	.9000-01	.9220	.4596-02	.2818-02	.4260	3.026	597.9
11	11.250	.92600	683.00	.1005	.1409	.1819	.9220	.9290-02	.5131-02	.6700	4.729	618.4
11	11.250	.95000	684.00	.7240-01	.9120-01	.1066	.9220	.5446-02	.3698-02	.6730	4.811	566.9
11	17.000	.33000	685.00	.3620-01	.4420-01	.5050-01	.9220	.2581-02	.1847-02	.3800	2.557	543.3
11	17.000	.34000	686.00	.4120-01	.5040-01	.5760-01	.9220	.2939-02	.2104-02	.4320	2.912	543.3
45	17.000	.35000	687.00	.6110-01	.7530-01	.8660-01	.9220	.4424-02	.3118-02	.6170	4.138	551.0
11	17.000	.35500	2102.0	.6650-01	.8260-01	.9550-01	.9220	.4871-02	.3395-02	.6530	4.256	555.4
11	17.000	.36000	688.00	.6740-01	.8310-01	.9560-01	.9220	.4883-02	.3443-02	.6820	4.575	550.8
11	17.000	.37000	689.00	.6220-01	.7630-01	.8750-01	.9220	.4466-02	.3176-02	.6420	4.314	546.8
11	17.000	.37500	690.00	.5920-01	.7250-01	.8300-01	.9220	.4236-02	.3022-02	.6160	4.157	545.0
45	17.000	.42500	2171.0	.1149	.1539	.1900	.9220	.9698-02	.5864-02	.8650	5.402	600.3
45	17.000	.43000	2176.0	.1343	.1823	.2280	.9220	.1163-01	.6853-02	.9730	6.144	605.9
9	17.000	.50000	691.00	.1707	.2261	.2764	.9220	.1411-01	.8713-02	1.332	8.733	596.9
9	17.000	.60000	692.00	.7430-01	.9180-01	.1059	.9220	.5405-02	.3792-02	.7430	4.776	553.8
9	17.000	.70000	693.00	.5230-01	.6510-01	.7550-01	.9220	.3855-02	.2672-02	.5090	3.432	559.2
9	17.000	.80000	694.00	.4120-01	.5090-01	.5870-01	.9220	.2995-02	.2106-02	.4150	2.598	552.8
9	17.000	.92600	696.00	.7960-01	.1107	.1417	.9220	.7233-02	.4064-02	.5430	3.837	616.2
45	20.980	.35500	2098.0	.7160-01	.8860-01	.1022	.9220	.5218-02	.3655-02	.7120	4.715	553.0
45	20.980	.36000	2099.0	.5810-01	.7120-01	.8150-01	.9220	.4158-02	.2966-02	.6040	3.978	544.3
45	20.980	.36500	2100.0	.5130-01	.6250-01	.7120-01	.9220	.3631-02	.2619-02	.5480	3.624	538.5
45	23.070	.35500	2094.0	.6390-01	.7900-01	.9110-01	.9220	.4649-02	.3260-02	.6360	4.177	552.6
45	23.070	.36000	2095.0	.5440-01	.6660-01	.7610-01	.9220	.3884-02	.2777-02	.5680	3.745	543.3
45	23.070	.36500	2096.0	.4840-01	.5880-01	.6690-01	.9220	.3414-02	.2470-02	.5210	3.445	537.0
44	23.070	.43500	2000.0	.1025	.1330	.1596	.9220	.8136-02	.5225-02	.8490	5.346	582.7
44	23.070	.56890	2001.0	.6540-01	.8240-01	.9640-01	.9220	.4911-02	.3334-02	.6030	4.094	564.2
44	23.070	.70270	2002.0	.3920-01	.4870-01	.5630-01	.9220	.2871-02	.1996-02	.3810	2.703	554.5
44	23.070	.83500	2003.0	.4240-01	.5280-01	.6120-01	.9220	.3119-02	.2161-02	.4090	2.585	556.1

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT15)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
44	23.070	.90000	2004.0	.8270-01	.1068	.1278	.9220	.6513-02	.4212-02	.6930	4.580	580.6
45	23.070	.92600	2154.0	.5790-01	.7870-01	.9840-01	.9220	.5023-02	.2954-02	.4180	2.896	606.2
9	29.800	.70000-01	700.00	.3026	.3926	.4124	.9419	.2106-01	.1545-01	2.525	16.74	586.3
9	29.800	.10000+00	701.00	.1943	.2426	.2629	.9345	.1342-01	.9921-02	1.867	11.82	561.5
9	29.800	.15000	702.00	.9660-01	.1176	.1314	.9260	.6707-02	.4935-02	1.037	7.441	539.7
9	29.800	.20000	703.00	.4220-01	.5080-01	.5720-01	.9222	.2920-02	.2155-02	.4800	3.230	527.0
9	29.800	.30000	704.00	.2460-01	.2990-01	.3400-01	.9220	.1735-02	.1256-02	.2660	1.893	537.9
9	29.800	.35000	705.00	.6730-01	.8270-01	.9490-01	.9220	.4848-02	.3434-02	.6880	4.706	549.3
45	29.800	.35500	2090.0	.5830-01	.7250-01	.8400-01	.9220	.4288-02	.2976-02	.5670	3.713	557.2
45	29.800	.36500	2092.0	.5790-01	.7160-01	.8250-01	.9220	.4209-02	.2953-02	.5780	3.781	552.2
45	29.800	.37000	2093.0	.5480-01	.6740-01	.7730-01	.9220	.3946-02	.2795-02	.5590	3.674	548.0
11	29.800	.50000	707.00	.7430-01	.9270-01	.1076	.9220	.5494-02	.3795-02	.7170	4.874	560.0
11	29.800	.60000	708.00	.4550-01	.5540-01	.6310-01	.9220	.3221-02	.2325-02	.4890	3.129	538.7
11	29.800	.70000	709.00	.4110-01	.5010-01	.5710-01	.9220	.2914-02	.2097-02	.4360	2.791	540.7
11	29.800	.80000	710.00	.4920-01	.5990-01	.6820-01	.9220	.3481-02	.2510-02	.5260	3.290	539.4
45	31.430	.44000	2166.0	.1012	.1286	.1515	.9220	.7732-02	.5166-02	.9080	5.955	572.1
44	31.430	.47600	2005.0	.7310-01	.9120-01	.1059	.9220	.5398-02	.3726-02	.6990	4.618	557.5
44	31.430	.51100	2006.0	.6630-01	.8280-01	.9620-01	.9220	.4902-02	.3377-02	.6310	4.295	558.3
44	31.430	.54600	2007.0	.2530-01	.3090-01	.3530-01	.9220	.1801-02	.1288-02	.2630	1.850	541.1
44	31.430	.61600	2009.0	.3440-01	.4210-01	.4820-01	.9220	.2457-02	.1752-02	.3550	2.434	542.7
44	31.430	.65000	2010.0	.3630-01	.4440-01	.5070-01	.9220	.2586-02	.1852-02	.3790	2.644	540.4
44	31.430	.68600	2014.0	.3150-01	.3860-01	.4420-01	.9220	.2253-02	.1606-02	.3250	2.274	542.6
44	31.430	.72050	2015.0	.2610-01	.3210-01	.3680-01	.9220	.1876-02	.1332-02	.2670	1.985	544.5
44	31.430	.79040	2017.0	.5460-01	.6720-01	.7710-01	.9220	.3932-02	.2781-02	.5530	3.493	546.5
44	31.430	.86000	2019.0	.1190-01	.1450-01	.1650-01	.9220	.8413-03	.6058-03	.1260	.8150	537.6
44	31.430	.89520	2020.0	.7470-01	.9390-01	.1096	.9220	.5587-02	.3809-02	.6960	4.491	562.5
45	31.430	.92600	2153.0	.9360-01	.1215	.1458	.9220	.7442-02	.4775-02	.7770	5.561	585.1
44	33.750	.25000	2079.0	.2550-01	.3140-01	.3600-01	.9220	.1834-02	.1300-02	.2590	2.131	545.6
44	33.750	.30000	2080.0	.2760-01	.3380-01	.3880-01	.9220	.1975-02	.1404-02	.2820	1.861	544.1
44	33.750	.37500	2081.0	.6520-01	.8100-01	.9360-01	.9220	.4769-02	.3325-02	.6380	4.225	553.2
44	33.750	.40000	2082.0	.9510-01	.1222	.1455	.9220	.7413-02	.4846-02	.8140	5.321	577.3
44	33.750	.45000	2084.0	.7870-01	.9810-01	.1138	.9220	.5801-02	.4013-02	.7570	4.999	556.7
44	33.750	.60000	2085.0	.3530-01	.4320-01	.4940-01	.9220	.2519-02	.1798-02	.3650	2.432	542.0
45	33.750	.65000	2086.0	.3720-01	.4530-01	.5160-01	.9220	.2634-02	.1901-02	.3980	2.682	538.2
45	33.750	.92600	2152.0	.8260-01	.1069	.1279	.9220	.6529-02	.4218-02	.6950	4.978	583.1
44	36.320	.25000	2066.0	.8850-01	.1114	.1302	.9220	.6635-02	.4510-02	.8190	5.392	563.7
44	36.320	.30000	2067.0	.2760-01	.3400-01	.3900-01	.9220	.1987-02	.1407-02	.2800	1.846	546.0
44	36.320	.35000	2069.0	.5650-01	.7020-01	.8140-01	.9220	.4147-02	.2877-02	.5460	3.613	555.3
44	36.320	.37500	2070.0	.6300-01	.7840-01	.9090-01	.9220	.4630-02	.3213-02	.6100	4.033	555.3
44	36.320	.40000	2071.0	.8770-01	.1112	.1308	.9220	.6667-02	.4471-02	.7890	5.182	568.7
44	36.320	.42000	2072.0	.8720-01	.1099	.1288	.9220	.6562-02	.4442-02	.7990	5.259	565.3
44	36.320	.42500	2073.0	.8710-01	.1099	.1288	.9220	.6566-02	.4440-02	.7970	5.245	565.6
44	36.320	.43000	2074.0	.8400-01	.1053	.1227	.9220	.6254-02	.4281-02	.7890	5.201	560.9

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT15)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
44	36.320	.43500	2075.0	.8550-01	.1073	.1252	.9220	.6380-02	.4357-02	.7990	5.264	561.9
44	36.320	.60000	2077.0	.3050-01	.3720-01	.4250-01	.9220	.2167-02	.1553-02	.3180	2.139	540.2
44	36.320	.65000	2078.0	.3040-01	.3720-01	.4260-01	.9220	.2169-02	.1550-02	.3160	2.167	541.5
11	37.700	.50000-01	715.00	.3047	.3934	.4017	.9465	.2051-01	.1556-01	2.584	16.56	582.8
11	37.700	.70000-01	716.00	.3282	.4329	.4606	.9406	.2352-01	.1676-01	2.594	17.29	594.1
11	37.700	.10000+00	717.00	.2427	.3048	.3331	.9334	.1701-01	.1240-01	2.279	14.65	565.0
11	37.700	.15000	718.00	.1313	.1616	.1824	.9253	.9317-02	.6706-02	1.339	9.788	549.2
11	37.700	.20000	719.00	.6080-01	.7310-01	.8250-01	.9221	.4211-02	.3103-02	.6880	4.686	527.1
11	37.700	.30000	720.00	.2390-01	.2900-01	.3300-01	.9220	.1685-02	.1218-02	.2570	1.846	538.0
9	37.700	.35000	721.00	.5240-01	.6420-01	.7350-01	.9220	.3751-02	.2674-02	.5450	3.777	546.1
9	37.700	.37500	722.00	.6240-01	.7660-01	.8790-01	.9220	.4488-02	.3184-02	.6410	4.438	548.5
9	37.700	.50000	723.00	.7240-01	.8920-01	.1026	.9220	.5237-02	.3698-02	.7360	5.075	550.7
9	37.700	.60000	724.00	.3150-01	.3800-01	.4310-01	.9220	.2199-02	.1608-02	.3500	2.252	532.2
9	37.700	.70000	725.00	.3210-01	.3900-01	.4440-01	.9220	.2268-02	.1637-02	.3440	2.197	539.4
9	37.700	.80000	726.00	.3320-01	.4010-01	.4550-01	.9220	.2322-02	.1693-02	.3650	2.312	533.9
9	37.700	.87000	727.00	.5130-01	.6300-01	.7220-01	.9220	.3689-02	.2621-02	.5300	3.385	547.7
9	37.700	.92600	728.00	.8550-01	.1082	.1272	.9220	.6492-02	.4363-02	.7780	5.588	571.4
10	39.000	.10000-01	993.00	.3935	.5365	.5213	.9540	.2663-01	.2010-01	2.823	19.90	608.4
10	39.000	.25000-01	994.00	.2942	.3803	.3736	.9530	.1908-01	.1503-01	2.487	16.61	583.4
44	45.000	.25000	2036.0	.2050-01	.2510-01	.2870-01	.9220	.1464-02	.1045-02	.2120	1.723	541.9
44	45.000	.32500	2038.0	.4840-01	.6000-01	.6930-01	.9220	.3530-02	.2469-02	.4770	3.257	551.9
44	45.000	.35000	2039.0	.5600-01	.6960-01	.8050-01	.9220	.4101-02	.2855-02	.5460	3.669	553.9
44	45.000	.37500	2040.0	.4910-01	.6070-01	.6990-01	.9220	.3563-02	.2501-02	.4880	3.284	550.1
44	45.000	.40000	2041.0	.7690-01	.9620-01	.1118	.9220	.5698-02	.3920-02	.7300	4.891	559.0
44	45.000	.42000	2042.0	.8390-01	.1052	.1226	.9220	.6246-02	.4277-02	.7890	5.281	560.8
44	45.000	.42500	2043.0	.8270-01	.1036	.1206	.9220	.6144-02	.4216-02	.7810	5.231	559.9
44	45.000	.43000	2044.0	.7990-01	.9990-01	.1161	.9220	.5915-02	.4073-02	.7600	5.094	558.6
44	45.000	.43500	2045.0	.7860-01	.9830-01	.1142	.9220	.5820-02	.4008-02	.7480	5.015	558.5
44	45.000	.44000	2046.0	.7480-01	.9310-01	.1079	.9220	.5500-02	.3810-02	.7210	4.837	556.0
44	45.000	.43000	2047.0	.8050-01	.1004	.1166	.9220	.5943-02	.4102-02	.7700	5.193	557.5
44	45.000	.47000	2048.0	.8410-01	.1056	.1233	.9220	.6284-02	.4285-02	.7830	5.317	562.5
44	45.000	.55000	2049.0	.2220-01	.2710-01	.3100-01	.9220	.1581-02	.1130-02	.2300	1.586	541.4
44	45.000	.60000	2050.0	.3180-01	.3890-01	.4450-01	.9220	.2266-02	.1618-02	.3290	2.222	542.0
44	45.000	.65000	2051.0	.2970-01	.3630-01	.4150-01	.9220	.2117-02	.1512-02	.3080	2.055	541.7
44	45.000	.75000	2052.0	.2150-01	.2640-01	.3020-01	.9220	.1539-02	.1097-02	.2220	1.416	542.6
44	45.000	.80000	2053.0	.3540-01	.4350-01	.4990-01	.9220	.2541-02	.1805-02	.3620	2.278	544.6
44	45.000	.83000	2054.0	.4980-01	.6130-01	.7040-01	.9220	.3589-02	.2536-02	.5030	3.149	547.0
44	45.000	.84000	2055.0	.5740-01	.7100-01	.8180-01	.9220	.4168-02	.2928-02	.5720	3.577	549.9
44	45.000	.85000	2056.0	.4460-01	.5500-01	.6320-01	.9220	.3223-02	.2274-02	.4490	2.851	547.8
44	45.000	.86000	2057.0	.3960-01	.4870-01	.5600-01	.9220	.2853-02	.2016-02	.4000	2.599	547.0
44	45.000	.87000	2058.0	.4230-01	.5220-01	.6000-01	.9220	.3059-02	.2158-02	.4260	2.834	547.9
44	45.000	.89000	2060.0	.5330-01	.6630-01	.7680-01	.9220	.3911-02	.2716-02	.5170	3.438	555.0
44	45.000	.90000	2061.0	.3700-01	.4590-01	.5300-01	.9220	.2698-02	.1888-02	.3650	2.442	551.7

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT15)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
44	45.000	.91000	2062.0	.2390-01	.2950-01	.3390-01	.9220	.1727-02	.1219-02	.2400	1.965	547.9
44	45.000	.92600	2063.0	.7940-01	.1027	.1227	.9220	.6255-02	.4049-02	.6670	4.632	580.4
44	45.000	.93500	2064.0	.9760-01	.1322	.1650	.9220	.8410-02	.4975-02	.7080	5.139	602.9
44	45.000	.94500	2065.0	.6590-01	.8350-01	.9830-01	.9220	.5009-02	.3358-02	.5920	3.889	568.9
9	180.00	.15000-01	2182.0	.3893	.5922	.5211	.9631	.2660-01	.1988-01	2.175	15.61	640.3
9	180.00	.20000-01	2183.0	.3928	.5511	.5021	.9621	.2564-01	.2006-01	2.617	19.17	619.3
9	180.00	.25000-01	2184.0	.3711	.4981	.4600	.9621	.2348-01	.1895-01	2.785	19.76	602.7
9	180.00	.30000-01	2185.0	.9370-01	.1163	.1100	.9619	.5616-02	.4783-02	.9210	6.641	557.2
9	180.00	.40000-01	737.00	.3259	.4215	.4020	.9583	.2053-01	.1664-01	2.748	17.59	584.6
9	180.00	.45000-01	738.00	.3513	.4562	.4391	.9565	.2242-01	.1793-01	2.922	18.96	586.8
9	180.00	.60000-01	739.00	.2977	.3805	.3774	.9515	.1927-01	.1520-01	2.617	17.32	577.5
9	180.00	.70000-01	740.00	.2672	.3402	.3433	.9484	.1753-01	.1364-01	2.382	15.88	575.1
9	180.00	.80000-01	741.00	.2233	.2824	.2895	.9454	.1478-01	.1140-01	2.041	14.66	570.8
9	180.00	.10000+00	742.00	.2038	.2542	.2675	.9400	.1366-01	.1041-01	1.968	13.06	560.6
9	180.00	.12500	743.00	.1505	.1862	.2013	.9342	.1028-01	.7684-02	1.500	10.87	554.5
9	180.00	.15000	744.00	.1201	.1473	.1623	.9296	.8287-02	.6134-02	1.247	8.669	546.5
9	180.00	.17500	745.00	.8330-01	.1013	.1131	.9260	.5772-02	.4252-02	.8950	6.756	539.1
9	180.00	.20000	746.00	.5910-01	.7150-01	.8040-01	.9235	.4105-02	.3017-02	.6530	4.702	533.4
9	180.00	.21500	747.00	.5190-01	.6340-01	.7220-01	.9226	.3685-02	.2650-02	.5480	3.802	543.2
9	180.00	.23000	748.00	.4030-01	.4920-01	.5610-01	.9221	.2866-02	.2055-02	.4240	3.141	543.4
9	180.00	.25000	750.00	.1820-01	.2220-01	.2530-01	.9220	.1293-02	.9280-03	.1920	1.559	542.5
9	180.00	.30000	751.00	.3880-01	.4750-01	.5440-01	.9220	.2776-02	.1983-02	.4060	2.665	545.1
9	180.00	.35000	752.00	.3970-01	.4820-01	.5490-01	.9220	.2803-02	.2025-02	.4260	2.705	539.2
9	180.00	.40000	753.00	.3560-01	.4310-01	.4890-01	.9220	.2499-02	.1818-02	.3900	2.524	535.1
9	180.00	.50000	754.00	.4040-01	.4930-01	.5620-01	.9220	.2870-02	.2064-02	.4300	2.821	541.5
9	180.00	.60000	755.00	.3900-01	.4740-01	.5400-01	.9220	.2756-02	.1990-02	.4180	2.692	539.5
9	180.00	.70000	756.00	.3100-01	.3770-01	.4290-01	.9220	.2190-02	.1581-02	.3320	2.202	539.6
9	180.00	.80000	757.00	.3550-01	.4310-01	.4890-01	.9220	.2499-02	.1814-02	.3870	2.439	536.4
9	180.00	.90000	758.00	.1850-01	.2250-01	.2560-01	.9220	.1310-02	.9467-03	.2000	1.297	538.7
9	235.00	.22000	759.00	.8090-01	.1008	.1145	.9258	.5846-02	.4132-02	.7840	5.797	559.9
9	235.00	.25000	760.00	.4220-01	.5200-01	.5930-01	.9238	.3026-02	.2153-02	.4270	3.334	551.6
9	235.00	.27000	761.00	.3730-01	.4590-01	.5230-01	.9238	.2670-02	.1904-02	.3790	2.815	550.6
9	235.00	.30000	762.00	.7550-01	.9350-01	.1068	.9238	.5453-02	.3854-02	.7510	4.498	554.9
9	235.00	.32000	763.00	.8480-01	.1051	.1202	.9238	.6137-02	.4330-02	.8400	4.949	555.7
9	235.00	.34000	764.00	.1026	.1278	.1466	.9238	.7488-02	.5240-02	.9980	5.882	559.4
9	235.00	.36000	765.00	.1263	.1596	.1853	.9238	.9459-02	.6449-02	1.158	6.880	570.2
9	235.00	.38000	766.00	.1092	.1367	.1575	.9238	.8044-02	.5574-02	1.037	6.252	563.7
11	247.00	.23000	768.00	.8080-01	.1013	.1158	.9252	.5914-02	.4127-02	.7650	5.641	563.6
11	247.00	.25000	769.00	.4410-01	.5480-01	.6270-01	.9242	.3202-02	.2250-02	.4290	3.320	558.1
11	247.00	.27000	770.00	.5500-01	.6970-01	.8090-01	.9242	.4130-02	.2808-02	.4970	3.583	571.7
11	247.00	.30000	772.00	.1016	.1290	.1497	.9242	.7645-02	.5190-02	.9170	5.534	572.2
11	247.00	.31000	773.00	.1194	.1516	.1760	.9242	.8986-02	.6099-02	1.077	6.448	572.3
11	247.00	.32000	774.00	.1456	.1874	.2198	.9242	.1123-01	.7437-02	1.251	7.393	580.7

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT15)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
11	247.00	.32500	775.00	.1671	.2169	.2562	.9242	.1309-01	.8536-02	1.393	8.236	585.7
11	247.00	.33000	776.00	.1759	.2293	.2719	.9242	.1388-01	.8985-02	1.445	8.557	588.1
11	247.00	.33500	777.00	.1885	.2472	.2944	.9242	.1504-01	.9626-02	1.518	8.976	591.2
11	247.00	.34000	778.00	.1936	.2533	.3011	.9242	.1538-01	.9886-02	1.571	9.293	590.0
11	247.00	.34500	779.00	.1904	.2493	.2966	.9242	.1515-01	.9725-02	1.541	9.143	590.4
11	247.00	.35000	780.00	.1576	.2029	.2382	.9242	.1217-01	.8048-02	1.349	8.060	581.3
11	247.00	.35500	781.00	.1760	.2288	.2706	.9242	.1382-01	.8989-02	1.459	8.720	586.5
9	247.00	.36000	782.00	.1426	.1813	.2108	.9242	.1076-01	.7280-02	1.278	7.683	574.2
9	247.00	.36500	783.00	.1366	.1726	.1997	.9242	.1020-01	.6974-02	1.254	7.533	570.0
9	247.00	.37000	784.00	.1269	.1597	.1842	.9242	.9407-02	.6479-02	1.182	7.152	567.3
9	247.00	.37500	785.00	.1233	.1552	.1792	.9242	.9148-02	.6295-02	1.147	6.992	567.6
9	247.00	.38000	786.00	.1166	.1463	.1684	.9242	.8601-02	.5952-02	1.098	6.723	565.3
9	247.00	.39000	787.00	.9460-01	.1175	.1343	.9242	.6858-02	.4829-02	.9270	5.716	557.7
9	247.00	.40000	788.00	.7340-01	.9050-01	.1028	.9242	.5250-02	.3748-02	.7440	4.640	551.2
10	247.00	.50000	789.00	.4850-01	.5970-01	.6780-01	.9243	.3465-02	.2475-02	.4910	3.144	550.3
10	247.00	.60000	790.00	.5150-01	.6360-01	.7240-01	.9243	.3699-02	.2630-02	.5160	3.376	552.7
10	247.00	.70000	791.00	.5290-01	.6600-01	.7570-01	.9243	.3865-02	.2704-02	.5110	3.583	560.0
10	247.00	.80000	792.00	.5160-01	.6360-01	.7240-01	.9243	.3695-02	.2633-02	.5190	3.257	551.6
10	247.00	.90000	793.00	.3530-01	.4450-01	.5140-01	.9243	.2627-02	.1802-02	.3250	2.076	568.2
45	247.00	.92600	2144.0	.6460-01	.8410-01	.9950-01	.9243	.5079-02	.3298-02	.5320	3.651	586.4
45	247.00	.93000	2149.0	.7430-01	.9770-01	.1166	.9243	.5951-02	.3789-02	.5910	4.171	592.0
45	250.57	.92600	2143.0	.8520-01	.1119	.1333	.9244	.6802-02	.4349-02	.6820	4.667	591.0
45	250.57	.93000	2148.0	.1225	.1652	.2010	.9244	.1026-01	.6251-02	.9050	6.214	603.1
45	250.57	.93700	2087.0	.1578	.2507	.3590	.9244	.1832-01	.8053-02	.8130	5.515	646.9
10	258.00	.27000	794.00	.5200-01	.6520-01	.7500-01	.9245	.3828-02	.2654-02	.4890	3.455	564.6
10	258.00	.29000	795.00	.1012	.1284	.1487	.9245	.7593-02	.5171-02	.9160	5.974	571.7
43	258.00	.32000	798.00	.2220	.3010	.3676	.9246	.1872-01	.1130-01	1.599	9.381	601.0
43	258.00	.34000	802.00	.2502	.3438	.4246	.9246	.2162-01	.1274-01	1.737	10.20	606.0
43	258.00	.34500	803.00	.2346	.3182	.3886	.9246	.1979-01	.1195-01	1.688	9.957	601.1
43	258.00	.35500	805.00	.2113	.2799	.3353	.9246	.1707-01	.1076-01	1.631	9.670	590.9
43	258.00	.36000	806.00	.1923	.2531	.3017	.9246	.1537-01	.9790-02	1.511	8.998	588.0
43	258.00	.36500	807.00	.1775	.2354	.2822	.9246	.1437-01	.9038-02	1.364	8.129	591.5
43	258.00	.37000	808.00	.1483	.1937	.2294	.9246	.1168-01	.7551-02	1.196	7.175	584.0
43	258.00	.37500	809.00	.1219	.1560	.1819	.9246	.9262-02	.6210-02	1.055	6.368	572.4
43	258.00	.38000	810.00	.9210-01	.1157	.1331	.9246	.6778-02	.4692-02	.8540	5.214	560.4
10	258.00	.40000	812.00	.5050-01	.6150-01	.6920-01	.9245	.3535-02	.2580-02	.5390	3.335	539.8
45	258.00	.93500	2151.0	.9960-01	.1306	.1551	.9246	.7916-02	.5085-02	.8020	5.543	590.1
10	270.00	.40000-01	985.00	.3137	.4206	.3598	.9748	.1838-01	.1602-01	2.361	14.95	601.5
10	270.00	.50000-01	986.00	.3791	.5137	.4467	.9711	.2282-01	.1936-01	2.766	17.37	606.0
10	270.00	.60000-01	987.00	.3715	.4980	.4450	.9675	.2273-01	.1897-01	2.797	17.91	601.5
10	270.00	.70000-01	988.00	.3568	.4783	.4368	.9640	.2231-01	.1822-01	2.686	17.57	601.5
10	270.00	.80000-01	989.00	.3367	.4474	.4184	.9606	.2137-01	.1720-01	2.601	17.97	597.6
10	270.00	.10000+00	990.00	.3009	.3877	.3788	.9541	.1935-01	.1537-01	2.568	16.46	581.8

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT15)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
10	292.50	.80000	855.00	.1161	.1475	.1713	.9243	.8751-02	.5932-02	1.044	6.705	572.8
45	292.50	.82000	2129.0	.1212	.1547	.1802	.9243	.9197-02	.6184-02	1.068	6.456	575.1
45	292.50	.83000	2130.0	.1190	.1522	.1777	.9243	.9068-02	.6071-02	1.040	6.329	576.6
45	292.50	.85000	2132.0	.1174	.1506	.1762	.9243	.8992-02	.5990-02	1.015	6.211	578.3
45	292.50	.86000	2133.0	.1176	.1511	.1770	.9243	.9035-02	.5999-02	1.011	6.144	579.4
45	292.50	.87000	2134.0	.1185	.1530	.1798	.9243	.9176-02	.6047-02	1.004	6.128	581.9
45	292.50	.88000	2135.0	.1232	.1601	.1892	.9243	.9654-02	.6287-02	1.020	6.218	585.6
45	292.50	.89000	2136.0	.1746	.2316	.2783	.9243	.1420-01	.8908-02	1.353	8.225	596.0
10	292.50	.90000	856.00	.1695	.2272	.2755	.9243	.1407-01	.8659-02	1.277	8.060	601.4
45	292.50	.92600	2138.0	.6860-01	.1009	.1332	.9243	.6795-02	.3502-02	.4090	2.745	631.0
45	292.50	.93000	2139.0	.8580-01	.1338	.1879	.9243	.9587-02	.4376-02	.4560	3.118	643.7
45	301.50	.82000	2116.0	.1058	.1354	.1586	.9240	.8094-02	.5397-02	.9210	5.558	577.2
45	301.50	.83000	2117.0	.1109	.1420	.1663	.9240	.8488-02	.5660-02	.9660	5.798	577.2
45	301.50	.83500	2118.0	.1191	.1533	.1803	.9240	.9198-02	.6077-02	1.018	6.054	580.3
45	301.50	.84000	2119.0	.1191	.1533	.1802	.9240	.9196-02	.6077-02	1.019	6.108	580.2
45	301.50	.85000	2120.0	.1152	.1480	.1739	.9240	.8875-02	.5876-02	.9890	5.945	579.6
45	301.50	.86000	2021.0	.1006	.1291	.1515	.9240	.7730-02	.5133-02	.8690	5.254	578.6
45	301.50	.87000	2122.0	.8610-01	.1103	.1292	.9240	.6595-02	.4396-02	.7500	4.525	577.3
45	301.50	.88000	2123.0	.9910-01	.1287	.1523	.9240	.7773-02	.5057-02	.8230	4.976	585.1
45	301.50	.89000	2124.0	.1626	.2156	.2598	.9240	.1326-01	.8296-02	1.261	7.646	595.9
45	301.50	.90000	2125.0	.1433	.1914	.2318	.9240	.1183-01	.7313-02	1.089	6.649	598.9
45	301.50	.92600	2127.0	.1573	.2221	.2828	.9240	.1443-01	.8026-02	1.028	6.216	619.7
45	301.50	.93500	2128.0	.1600	.2245	.2841	.9240	.1450-01	.8164-02	1.062	6.915	617.7
45	305.40	.82000	2113.0	.1043	.1328	.1549	.9238	.7903-02	.5324-02	.9300	5.592	573.2
45	305.40	.83000	2114.0	.1145	.1468	.1722	.9238	.8789-02	.5843-02	.9930	5.962	577.8
45	305.40	.83500	2115.0	.1259	.1659	.1990	.9238	.1015-01	.6424-02	.9960	5.984	592.7
10	305.40	.84000	857.00	.1362	.1759	.2077	.9238	.1061-01	.6954-02	1.152	6.992	583.2
43	305.40	.85000	858.00	.1350	.1749	.2071	.9238	.1054-01	.6874-02	1.117	6.829	579.9
43	305.40	.86000	859.00	.1119	.1437	.1689	.9238	.8602-02	.5699-02	.9550	5.904	574.8
43	305.40	.87000	860.00	.1054	.1356	.1596	.9238	.8127-02	.5367-02	.8940	5.537	575.8
43	305.40	.88000	861.00	.1126	.1450	.1708	.9238	.8699-02	.5732-02	.9510	5.887	576.5
43	305.40	.89000	862.00	.1545	.2035	.2439	.9238	.1242-01	.7869-02	1.214	7.518	588.1
43	305.40	.90000	863.00	.1580	.2096	.2529	.9238	.1288-01	.8045-02	1.212	7.535	591.7
43	305.40	.91000	864.00	.9480-01	.1244	.1488	.9238	.7576-02	.4826-02	.7520	5.360	586.5
43	305.40	.92600	865.00	.1388	.1918	.2398	.9238	.1221-01	.7069-02	.9500	6.675	608.1
43	309.30	.80000	866.00	.9790-01	.1250	.1464	.9236	.7455-02	.4988-02	.8540	5.305	571.1
43	309.30	.81000	867.00	.9670-01	.1237	.1452	.9236	.7393-02	.4922-02	.8350	5.151	572.7
43	309.30	.83000	869.00	.1091	.1414	.1674	.9236	.8527-02	.5558-02	.9050	5.579	579.6
43	315.00	.50000-01	871.00	.3749	.5097	.4569	.9661	.2327-01	.1909-01	2.680	16.67	602.0
43	315.00	.60000-01	872.00	.3379	.4574	.4202	.9625	.2140-01	.1721-01	2.444	15.80	600.4
10	315.00	.70000-01	873.00	.3307	.4373	.4133	.9590	.2111-01	.1689-01	2.593	17.22	595.3
10	315.00	.10000+00	875.00	.2685	.3436	.3444	.9495	.1759-01	.1371-01	2.350	15.19	577.5
10	315.00	.15000	876.00	.1718	.2151	.2307	.9366	.1178-01	.8774-02	1.632	11.84	562.9

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT15)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
10	315.00	.20000	877.00	.1045	.1282	.1426	.9276	.7284-02	.5340-02	1.085	7.319	545.7
10	315.00	35000	878.00	.9530-01	.1186	.1363	.9233	.6962-02	.4867-02	.9290	5.738	558.1
10	315.00	.40000	879.00	.2350-01	.2530-01	.2640-01	.9233	.1347-02	.1201-02	.6370	4.835	218.9
10	315.00	.50000	880.00	.6250-01	.7820-01	.9020-01	.9233	.4607-02	.3194-02	.5980	4.075	561.7
10	315.00	.55000	881.00	.7040-01	.8860-01	.1027	.9233	.5247-02	.3593-02	.6550	4.316	566.7
10	315.00	.60000	882.00	.1026	.1299	.1514	.9233	.7734-02	.5241-02	.9340	6.200	570.7
10	315.00	.65000	883.00	.1175	.1498	.1756	.9233	.8967-02	.6002-02	1.042	7.009	575.3
10	315.00	.70000	884.00	.9320-01	.1190	.1395	.9233	.7127-02	.4761-02	.8230	5.768	575.9
10	315.00	.75000	885.00	.6930-01	.8770-01	.1022	.9233	.5220-02	.3541-02	.6320	3.936	570.4
10	315.00	.80000	886.00	.7990-01	.1005	.1165	.9233	.5951-02	.4082-02	.7460	4.642	566.1
10	315.00	.84000	887.00	.1185	.1536	.1824	.9233	.9319-02	.6055-02	.9920	6.119	585.0
43	315.00	.85000	888.00	.1249	.1661	.2016	.9234	.1026-01	.6359-02	.9510	5.889	592.9
43	315.00	.87000	890.00	.1325	.1735	.2076	.9234	.1057-01	.6750-02	1.062	6.626	585.0
43	315.00	.88000	891.00	.1254	.1645	.1972	.9234	.1004-01	.6387-02	.9990	6.262	586.0
43	315.00	.89000	892.00	.1230	.1620	.1949	.9234	.9924-02	.6261-02	.9650	6.150	588.2
43	315.00	.90000	893.00	.1053	.1403	.1706	.9234	.8685-02	.5364-02	.7980	5.131	593.6
43	315.00	.91000	894.00	.7310-01	.9690-01	.1172	.9234	.5966-02	.3723-02	.5630	4.019	591.1
43	315.00	.92600	895.00	.1111	.1537	.1931	.9234	.9833-02	.5660-02	.7590	5.351	608.3
43	322.30	.42000	897.00	.9190-01	.1160	.1352	.9230	.6887-02	.4678-02	.8340	5.314	564.2
43	322.30	.43500	898.00	.8080-01	.1016	.1181	.9230	.6013-02	.4113-02	.7440	4.612	561.6
43	322.30	.45000	899.00	.6940-01	.8740-01	.1016	.9230	.5175-02	.3532-02	.6360	4.128	562.4
43	322.30	.50000	900.00	.8950-01	.1140	.1339	.9230	.6817-02	.4555-02	.7850	5.167	570.1
43	322.30	.60000	901.00	.1254	.1632	.1948	.9230	.9920-02	.6388-02	1.025	6.690	581.9
43	322.30	.70000	902.00	.9090-01	.1169	.1382	.9230	.7036-02	.4631-02	.7740	5.206	575.3
45	324.45	.40500	2109.0	.1018	.1297	.1524	.9229	.7777-02	.5193-02	.9010	5.599	574.4
45	324.45	.41000	2110.0	.1091	.1396	.1645	.9229	.8392-02	.5567-02	.9530	5.918	576.6
45	324.45	.92600	2164.0	.5990-01	.8300-01	.1049	.9229	.5354-02	.3059-02	.4110	2.829	613.4
45	326.85	.40000	2107.0	.7790-01	.9750-01	.1129	.9228	.5761-02	.3974-02	.7400	4.627	561.7
45	326.85	.40500	2108.0	.8950-01	.1132	.1324	.9228	.6754-02	.4566-02	.8130	5.066	569.7
44	326.85	.44000	2021.0	.8550-01	.1079	.1258	.9228	.6411-02	.4355-02	.7810	4.917	565.8
44	326.85	.54600	2024.0	.7960-01	.1041	.1249	.9228	.6364-02	.4059-02	.6440	4.234	586.4
44	326.85	.58100	2025.0	.1440	.1905	.2311	.9228	.1178-01	.7337-02	1.119	7.651	592.7
44	326.85	.61600	2026.0	.1238	.1616	.1938	.9228	.9879-02	.6309-02	1.004	6.845	586.0
44	326.85	.65200	2027.0	.1202	.1569	.1880	.9228	.9583-02	.6128-02	.9770	6.663	585.7
44	326.85	.68600	2028.0	.9480-01	.1227	.1460	.9228	.7441-02	.4830-02	.7920	5.460	581.3
44	326.85	.72260	2029.0	.5920-01	.7550-01	.8870-01	.9228	.4522-02	.3018-02	.5220	3.592	572.3
44	326.85	.75790	2030.0	.4060-01	.5110-01	.5950-01	.9228	.3033-02	.2070-02	.3750	2.376	564.1
44	326.85	.79310	2031.0	.7210-01	.9210-01	.1085	.9228	.5528-02	.3677-02	.6320	3.905	573.4
44	326.85	.82830	2032.0	.7410-01	.9500-01	.1122	.9228	.5716-02	.3779-02	.6410	3.995	575.5
44	326.85	.86350	2033.0	.1056	.1370	.1634	.9228	.8326-02	.5384-02	.8760	5.394	582.4
44	326.85	.90000	2034.0	.1249	.1660	.2021	.9228	.1030-01	.6363-02	.9570	5.807	594.8
45	326.85	.92600	2163.0	.6550-01	.9130-01	.1161	.9228	.5927-02	.3344-02	.4430	3.042	615.4
44	326.85	.93390	2035.0	.1068	.1537	.2018	.9228	.1028-01	.5443-02	.6650	4.292	623.0

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
45	330.20	.40000	2104.0	.7700-01	.9590-01	.1106	.9227	.5645-02	.3931-02	.7480	4.692	557.4
45	330.20	.40500	2105.0	.8560-01	.1072	.1243	.9227	.6344-02	.4368-02	.8110	5.069	562.2
45	330.20	.41000	2106.0	.9750-01	.1233	.1441	.9227	.7352-02	.4977-02	.8910	5.539	568.8
43	330.20	.42000	905.00	.1041	.1321	.1550	.9227	.7891-02	.5300-02	.9270	5.914	567.6
43	330.20	.43500	906.00	.8660-01	.1093	.1275	.9227	.6495-02	.4409-02	.7880	5.068	563.7
43	330.20	.45000	907.00	.8030-01	.1021	.1198	.9227	.6102-02	.4092-02	.7130	4.600	568.2
43	330.20	.50000	908.00	.1344	.1762	.2122	.9227	.1080-01	.6845-02	1.072	7.521	585.8
43	330.20	.60000	909.00	.1259	.1630	.1943	.9227	.9896-02	.6413-02	1.046	6.733	579.3
43	330.20	.70000	910.00	.9490-01	.1222	.1449	.9227	.7381-02	.4831-02	.8030	5.331	576.3
43	330.20	.80000	911.00	.4860-01	.6110-01	.7120-01	.9227	.3626-02	.2473-02	.4470	2.842	561.8
43	330.20	.87000	912.00	.1470-01	.1810-01	.2070-01	.9227	.1054-02	.7485-03	.1480	.9500	544.2
45	330.20	.92600	2162.0	.7030-01	.9870-01	.1266	.9227	.6458-02	.3587-02	.4660	3.190	617.8
45	334.98	.92600	2161.0	.9360-01	.1361	.1813	.9225	.9252-02	.4778-02	.5730	3.886	628.0
43	334.98	.93500	913.00	.2144	.3787	.6549	.9225	.3335-01	.1092-01	.9340	6.431	656.9
43	334.98	.94500	914.00	.9740-01	.1237	.1454	.9225	.7403-02	.4958-02	.8640	6.153	568.2
43	337.50	.40000-01	915.00	.3348	.4487	.4089	.9643	.2082-01	.1705-01	2.491	15.40	596.3
43	337.50	.50000-01	916.00	.3582	.4804	.4476	.9607	.2280-01	.1824-01	2.662	16.74	596.5
43	337.50	.70000-01	918.00	.2834	.3729	.3637	.9540	.1852-01	.1443-01	2.232	15.20	587.7
43	337.50	.80000-01	919.00	.2730	.3571	.3553	.9508	.1809-01	.1390-01	2.193	14.69	584.6
43	337.50	.10000+00	920.00	.2222	.2849	.2932	.9450	.1493-01	.1132-01	1.910	12.59	573.6
43	337.50	.15000	921.00	.1372	.1728	.1894	.9331	.9644-02	.6986-02	1.258	9.048	562.3
43	337.50	.20000	922.00	.8330-01	.1030	.1165	.9254	.5935-02	.4242-02	.8230	5.477	548.4
45	337.50	.42000	923.00	.1109	.1425	.1691	.9224	.8609-02	.5648-02	.9460	6.085	574.9
43	337.50	.42500	2167.0	.1179	.1519	.1807	.9224	.9218-02	.6017-02	1.005	6.374	580.7
43	337.50	.43500	924.00	.1126	.1445	.1713	.9224	.8722-02	.5735-02	.9640	6.225	574.2
43	337.50	.85000	926.00	.7040-01	.8970-01	.1057	.9224	.5383-02	.3586-02	.6190	3.954	569.9
43	337.50	.86000	927.00	.7960-01	.1020	.1209	.9224	.6155-02	.4053-02	.6830	4.373	573.8
43	337.50	.87000	928.00	.9590-01	.1240	.1478	.9224	.7529-02	.4886-02	.8020	5.132	578.3
43	337.50	.88000	929.00	.4390-01	.5410-01	.6200-01	.9224	.3156-02	.2235-02	.4410	2.891	544.9
43	337.50	.89000	930.00	.1086	.1460	.1802	.9224	.9175-02	.5530-02	.8020	5.145	597.4
43	337.50	.90000	931.00	.9200-01	.1257	.1577	.9224	.8031-02	.4683-02	.6470	4.239	604.2
43	337.50	.91000	932.00	.5440-01	.7440-01	.9340-01	.9224	.4758-02	.2768-02	.3810	2.711	604.7
10	337.50	.92600	933.00	.1089	.1591	.2132	.9224	.1089-01	.5564-02	.6610	4.627	630.0
10	343.12	.41500	934.00	.1062	.1330	.1548	.9222	.7904-02	.5425-02	1.007	6.478	563.2
10	343.12	.42000	935.00	.1075	.1353	.1580	.9222	.8069-02	.5493-02	1.002	6.491	566.5
10	343.12	.42500	936.00	.1274	.1638	.1948	.9222	.9949-02	.6506-02	1.095	7.064	580.6
10	343.12	.44500	939.00	.1393	.1811	.2173	.9222	.1110-01	.7117-02	1.155	7.518	586.6
10	343.12	.45000	940.00	.1395	.1817	.2184	.9222	.1115-01	.7124-02	1.148	7.472	587.7
10	343.12	.50000	941.00	.1675	.2256	.2794	.9222	.1427-01	.8555-02	1.244	8.201	603.5
10	343.12	.60000	942.00	.1339	.1712	.2025	.9222	.1034-01	.6839-02	1.176	7.472	576.9
10	343.12	.80000	944.00	.7670-01	.9690-01	.1134	.9222	.5794-02	.3919-02	.7050	4.551	568.9
45	345.56	.42500	2168.0	.1242	.1616	.1940	.9222	.9899-02	.6339-02	1.026	6.485	586.0
45	345.56	.92600	2160.0	.1133	.1678	.2290	.9222	.1168-01	.5780-02	.6650	4.503	632.8

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT15)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
10	348.00	.35000	945.00	.5100-01	.6220-01	.7090-01	.9221	.3624-02	.2602-02	.5390	3.422	541.9
10	348.00	.36000	946.00	.5400-01	.6610-01	.7540-01	.9221	.3852-02	.2760-02	.5680	3.615	543.2
10	348.00	.37000	947.00	.5260-01	.6410-01	.7310-01	.9221	.3733-02	.2686-02	.5580	3.568	541.0
43	348.00	.37500	948.00	.5050-01	.6240-01	.7180-01	.9221	.3657-02	.2574-02	.5020	3.202	547.2
43	348.00	.38000	949.00	.4890-01	.6040-01	.6950-01	.9221	.3539-02	.2492-02	.4870	3.130	547.0
43	348.00	.38500	950.00	.4940-01	.6100-01	.7020-01	.9221	.3577-02	.2517-02	.4910	3.163	547.4
43	348.00	.39000	951.00	.5000-01	.6180-01	.7130-01	.9221	.3629-02	.2546-02	.4930	3.194	548.7
43	348.00	.39500	952.00	.5820-01	.7220-01	.8350-01	.9221	.4251-02	.2963-02	.5660	3.608	551.5
43	348.00	.40000	953.00	.6710-01	.8360-01	.9690-01	.9221	.4935-02	.3415-02	.6410	4.152	554.7
43	348.00	.41000	955.00	.9520-01	.1207	.1419	.9221	.7226-02	.4849-02	.8520	5.505	566.6
43	348.00	.41500	956.00	.1048	.1337	.1580	.9221	.8044-02	.5339-02	.9180	5.934	570.5
43	348.00	.42000	957.00	.1198	.1540	.1832	.9221	.9328-02	.6102-02	1.020	6.599	575.2
43	348.00	.42500	958.00	.1132	.1457	.1736	.9221	.8840-02	.5763-02	.9570	6.190	576.3
43	348.00	.43000	959.00	.1325	.1769	.2176	.9221	.1108-01	.6748-02	.9970	6.371	594.6
43	348.00	.44000	960.00	.1512	.2048	.2553	.9221	.1300-01	.7698-02	1.091	6.971	600.6
43	348.00	.44500	961.00	.1591	.2166	.2714	.9221	.1382-01	.8100-02	1.131	7.220	602.7
43	348.00	.47000	965.00	.1596	.2139	.2641	.9221	.1345-01	.8126-02	1.187	7.711	596.4
43	348.00	.85000	968.00	.7260-01	.9250-01	.1092	.9221	.5559-02	.3698-02	.6380	4.093	569.7
43	348.00	.86000	969.00	.7240-01	.9310-01	.1108	.9221	.5644-02	.3688-02	.6150	3.944	575.6
44	348.00	.89000	972.00	.1368	.1899	.2422	.9221	.1234-01	.6974-02	.9300	5.982	611.8
44	348.00	.90000	973.00	.9100-01	.1270	.1629	.9221	.8304-02	.4639-02	.6100	4.015	613.7
44	348.00	.91000	974.00	.4750-01	.6600-01	.8430-01	.9221	.4298-02	.2423-02	.3220	2.276	612.2
44	348.00	.92600	975.00	.1084	.1648	.2322	.9221	.1183-01	.5522-02	.6010	4.167	636.4
45	352.20	.93700	2089.0	.9490-01	.1256	.1534	.9221	.7829-02	.4842-02	.7400	5.053	595.0
45	354.00	.42500	2169.0	.1930-01	.2380-01	.2730-01	.9220	.1393-02	.9845-03	.1960	1.262	548.9
45	354.00	.43000	2174.0	.1190	.1594	.1968	.9220	.1004-01	.6071-02	.8950	5.622	600.3
45	354.00	.43500	2177.0	.1743	.2414	.3077	.9220	.1570-01	.8894-02	1.196	7.462	613.4
45	354.00	.44000	2179.0	.1902	.2642	.3378	.9220	.1724-01	.9706-02	1.295	8.078	614.4
45	355.16	.92600	2158.0	.1136	.1744	.2488	.9220	.1270-01	.5798-02	.6220	4.265	640.5

EXTERNAL TANK

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
18	.4000-01	.0000	4.020	72.50	740.0	174.7	.4650	5.260	2604.	.2233-03	.1407-06	4.132
19	.0000	.0000	4.020	72.40	740.0	174.9	.4640	5.252	2605.	.2227-03	.1408-06	4.119
20	.0000	.0000	4.020	72.50	741.0	175.1	.4650	5.259	2607.	.2227-03	.1410-06	4.118
36	-.2000-01	.0000	4.020	72.40	743.0	175.5	.4640	5.251	2609.	.2219-03	.1413-06	4.099
37	-.2000-01	.0000	4.020	72.40	747.0	176.6	.4640	5.252	2617.	.2206-03	.1421-06	4.062
38	-.2000-01	.0000	4.020	72.40	750.0	177.2	.4640	5.251	2622.	.2197-03	.1427-06	4.039

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
18	.5099-01	.1133-01
19	.5095-01	.1134-01
20	.5100-01	.1134-01
36	.5097-01	.1137-01
37	.5102-01	.1141-01
38	.5104-01	.1144-01

TEST DATA

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
19	.00000	.25000-01	2187.0	.5162	.6762	.6254	.9631	.3187-01	.2630-01	4.113	28.51	584.0
19	.00000	.30000-01	2188.0	.5394	.7064	.6540	.9629	.3333-01	.2748-01	4.303	30.02	583.8
18	.00000	.40000-01	600.00	.4529	.5675	.5425	.9591	.2766-01	.2309-01	4.227	27.05	556.5
18	.00000	.50000-01	601.00	.4170	.5241	.5096	.9555	.2598-01	.2126-01	3.846	24.66	558.6
18	.00000	.70000-01	603.00	.3310	.4111	.4132	.9489	.2107-01	.1688-01	3.202	21.82	549.8
18	.00000	.80000-01	604.00	.2947	.3641	.3713	.9459	.1893-01	.1503-01	2.913	18.96	545.7
18	.00000	.15000	606.00	.1300	.1568	.1712	.9297	.8728-02	.6630-02	1.434	10.55	523.2
18	.00000	.20000	607.00	.7010-01	.8400-01	.9380-01	.9236	.4785-02	.3577-02	.8010	5.308	515.6
18	.00000	.21000	608.00	.6040-01	.7300-01	.8240-01	.9229	.4200-02	.3078-02	.6570	4.589	526.0
18	.00000	.22000	609.00	.5110-01	.6190-01	.7000-01	.9224	.3570-02	.2606-02	.5540	4.164	527.0
18	.00000	.30000	610.00	.4430-01	.5400-01	.6140-01	.9220	.3133-02	.2260-02	.4680	3.227	532.5
18	.00000	.35000	611.00	.4100-01	.4970-01	.5640-01	.9220	.2875-02	.2093-02	.4440	2.985	527.5

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IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT17)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
18	.00000	.36000	612.00	.4280-01	.5190-01	.5900-01	.9220	.3007-02	.2184-02	.4600	3.122	528.8
18	.00000	.37000	613.00	.4790-01	.5850-01	.6680-01	.9220	.3407-02	.2445-02	.4990	3.376	535.3
18	.00000	.37500	614.00	.6590-01	.8080-01	.9240-01	.9220	.4714-02	.3361-02	.6760	4.559	538.5
20	.00000	.38000	615.00	.6420-01	.7880-01	.9020-01	.9220	.4598-02	.3276-02	.6590	4.443	540.1
20	.00000	.38500	616.00	.5820-01	.7140-01	.8180-01	.9220	.4173-02	.2970-02	.5950	4.012	540.8
20	.00000	.39500	618.00	.5480-01	.6800-01	.7860-01	.9220	.4008-02	.2797-02	.5350	3.602	549.9
20	.00000	.40000	619.00	.6180-01	.7710-01	.8940-01	.9220	.4558-02	.3154-02	.5920	3.951	553.6
20	.00000	.40500	620.00	.6940-01	.8630-01	.9990-01	.9220	.5094-02	.3539-02	.6700	4.492	551.8
20	.00000	.41000	621.00	.8780-01	.1098	.1278	.9220	.6517-02	.4478-02	.8270	5.535	556.4
20	.00000	.41500	622.00	.1114	.1398	.1631	.9220	.8318-02	.5681-02	1.036	6.901	558.8
20	.00000	.43000	625.00	.1706	.2178	.2576	.9220	.1314-01	.8703-02	1.491	9.903	569.9
20	.00000	.44000	626.00	.2225	.2890	.3471	.9220	.1770-01	.1135-01	1.828	12.08	580.1
20	.00000	.44500	627.00	.2639	.3456	.4180	.9220	.2132-01	.1346-01	2.110	14.04	584.4
20	.00000	.45000	628.00	.2484	.3199	.3813	.9220	.1945-01	.1267-01	2.101	14.05	575.3
20	.00000	.45500	629.00	.2008	.2542	.2988	.9220	.1524-01	.1024-01	1.805	12.32	564.9
18	.00000	.46000	630.00	.1503	.1909	.2248	.9220	.1146-01	.7663-02	1.333	8.874	565.6
18	.00000	.47000	631.00	.9460-01	.1176	.1361	.9220	.6939-02	.4825-02	.9140	6.131	550.2
18	.00000	.48000	632.00	.7610-01	.9430-01	.1089	.9220	.5552-02	.3880-02	.7430	5.022	548.0
18	.00000	.49000	633.00	.1072	.1359	.1598	.9220	.8150-02	.5468-02	.9580	6.483	564.3
18	.00000	.50000	634.00	.1348	.1725	.2047	.9220	.1044-01	.6871-02	1.161	8.022	570.7
18	.00000	.55000	635.00	.9680-01	.1212	.1412	.9220	.7197-02	.4935-02	.9050	5.985	556.1
18	.00000	.60000	636.00	.1116	.1381	.1593	.9220	.8123-02	.5689-02	1.095	7.063	547.0
18	.00000	.65000	637.00	.1038	.1281	.1474	.9220	.7514-02	.5292-02	1.033	6.686	544.4
18	.00000	.70000	638.00	.7770-01	.9580-01	.1101	.9220	.5613-02	.3963-02	.7780	5.332	543.3
18	.00000	.75000	639.00	.5120-01	.6280-01	.7180-01	.9220	.3663-02	.2610-02	.5240	3.391	538.9
18	.00000	.80000	640.00	.6550-01	.8020-01	.9180-01	.9220	.4678-02	.3341-02	.6750	4.247	537.7
18	.00000	.85000	641.00	.8860-01	.1092	.1257	.9220	.6407-02	.4515-02	.8820	5.582	544.2
18	.00000	.87000	643.00	.8170-01	.1015	.1175	.9220	.5989-02	.4168-02	.7910	5.091	549.8
18	.00000	.88000	644.00	.9070-01	.1134	.1320	.9220	.6729-02	.4625-02	.8530	5.527	555.1
20	.00000	.95000	649.00	.3460-01	.4260-01	.4900-01	.9220	.2501-02	.1764-02	.3460	2.526	545.0
38	5.6250	.42500	2170.0	.1235	.1578	.1869	.9220	.9538-02	.6303-02	1.087	6.965	577.5
38	5.6250	.43000	2175.0	.1702	.2226	.2690	.9220	.1373-01	.8687-02	1.383	8.802	590.7
38	5.6250	.44000	2180.0	.2017	.2669	.3258	.9220	.1663-01	.1029-01	1.581	10.03	596.4
20	11.250	.35000	650.00	.4630-01	.5630-01	.6400-01	.9220	.3262-02	.2362-02	.4950	3.352	531.7
20	11.250	.36000	651.00	.5320-01	.6480-01	.7380-01	.9220	.3766-02	.2711-02	.5590	3.792	534.9
20	11.250	.37000	652.00	.5370-01	.6570-01	.7500-01	.9220	.3826-02	.2741-02	.5590	3.773	537.4
20	11.250	.38000	654.00	.5860-01	.7170-01	.8200-01	.9220	.4182-02	.2988-02	.6050	4.094	538.8
20	11.250	.39000	656.00	.6090-01	.7460-01	.8540-01	.9220	.4356-02	.3105-02	.6250	4.229	539.9
20	11.250	.39500	657.00	.6180-01	.7600-01	.8710-01	.9220	.4442-02	.3154-02	.6290	4.249	541.8
20	11.250	.40500	659.00	.6910-01	.8600-01	.9960-01	.9220	.5080-02	.3524-02	.6650	4.483	552.5
20	11.250	.41000	660.00	.8060-01	.1006	.1168	.9220	.5959-02	.4113-02	.7670	5.153	554.6
20	11.250	.41500	661.00	.9180-01	.1148	.1336	.9220	.6813-02	.4682-02	.8660	5.791	556.3
20	11.250	.42000	662.00	.1054	.1334	.1566	.9220	.7987-02	.5376-02	.9510	6.354	564.3

DATE 23 JUN 81

IH72. AEDC V41A-R2A. INTEGRATED VEHICLE HEATING RATES

IH72. OTS W/PROTUBERANCES. EXTERNAL TANK HI/HREF

(RVZT17)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
20	11.250	.42500	663.00	.1264	.1614	.1911	.9220	.9745-02	.6447-02	1.101	7.360	570.4
20	11.250	.43000	664.00	.1528	.1981	.2375	.9220	.1211-01	.7794-02	1.264	8.488	579.0
20	11.250	.44000	665.00	.2025	.2648	.3199	.9220	.1631-01	.1033-01	1.628	10.84	583.6
20	11.250	.45000	666.00	.1810	.2317	.2748	.9220	.1401-01	.9232-02	1.564	10.48	571.8
20	11.250	.45500	667.00	.1824	.2350	.2802	.9220	.1429-01	.9302-02	1.541	10.30	575.5
20	11.250	.46000	668.00	.1567	.2010	.2388	.9220	.1218-01	.7991-02	1.343	9.020	573.1
20	11.250	.47000	669.00	.1469	.1870	.2207	.9220	.1125-01	.7491-02	1.295	8.743	568.3
20	11.250	.48000	670.00	.1363	.1727	.2030	.9220	.1035-01	.6950-02	1.222	8.263	565.3
20	11.250	.49000	671.00	.1230	.1555	.1826	.9220	.9312-02	.6270-02	1.110	7.485	564.2
20	11.250	.50000	672.00	.1285	.1634	.1927	.9220	.9827-02	.6555-02	1.138	7.831	567.6
20	11.250	.70000	674.00	.7070-01	.8710-01	.1001	.9220	.5104-02	.3603-02	.7080	4.825	544.6
20	11.250	.85000	676.00	.8020-01	.9940-01	.1148	.9220	.5852-02	.4088-02	.7840	4.977	549.4
20	11.250	.86000	677.00	.8340-01	.1038	.1204	.9220	.6141-02	.4251-02	.7990	5.089	553.3
20	11.250	.87000	678.00	.8600-01	.1077	.1253	.9220	.6392-02	.4386-02	.8080	5.181	557.0
20	11.250	.88000	679.00	.9960-01	.1257	.1474	.9220	.7516-02	.5079-02	.9060	5.862	562.9
20	11.250	.90000	681.00	.9120-01	.1162	.1373	.9220	.7004-02	.4650-02	.8000	5.334	569.1
20	11.250	.91000	682.00	.6950-01	.8850-01	.1045	.9220	.5330-02	.3546-02	.6120	4.418	568.5
20	11.250	.92600	683.00	.2429	.3302	.4134	.9220	.2108-01	.1239-01	1.736	12.37	601.0
20	11.250	.95000	684.00	.2660-01	.3300-01	.3810-01	.9220	.1943-02	.1355-02	.2590	1.864	550.3
20	17.000	.33000	685.00	.4010-01	.4890-01	.5570-01	.9220	.2840-02	.2046-02	.4230	2.861	534.4
20	17.000	.34000	686.00	.4410-01	.5370-01	.6110-01	.9220	.3116-02	.2248-02	.4660	3.154	533.8
20	17.000	.35000	687.00	.5430-01	.6630-01	.7580-01	.9220	.3865-02	.2768-02	.5640	3.808	537.5
38	17.000	.35500	2102.0	.5610-01	.6830-01	.7780-01	.9220	.3970-02	.2865-02	.6020	3.953	539.8
20	17.000	.36000	688.00	.5080-01	.6190-01	.7050-01	.9220	.3597-02	.2593-02	.5370	3.634	534.0
20	17.000	.37000	689.00	.4330-01	.5240-01	.5940-01	.9220	.3032-02	.2207-02	.4690	3.183	528.6
20	17.000	.37500	690.00	.4450-01	.5380-01	.6100-01	.9220	.3109-02	.2268-02	.4840	3.298	527.6
38	17.000	.42500	2171.0	.1234	.1573	.1858	.9220	.9485-02	.6299-02	1.097	6.930	575.8
38	17.000	.43000	2176.0	.1242	.1596	.1899	.9220	.9692-02	.6338-02	1.072	6.852	580.9
18	17.000	.50000	691.00	.1714	.2192	.2598	.9220	.1325-01	.8740-02	1.482	9.844	570.0
18	17.000	.60000	692.00	.8210-01	.9990-01	.1137	.9220	.5795-02	.4186-02	.8700	5.652	531.8
18	17.000	.70000	693.00	.6030-01	.7390-01	.8460-01	.9220	.4313-02	.3075-02	.6180	4.208	538.6
18	17.000	.80000	694.00	.4180-01	.5060-01	.5750-01	.9220	.2930-02	.2130-02	.4500	2.854	528.3
18	17.000	.92600	696.00	.2448	.3367	.4262	.9220	.2173-01	.1248-01	1.692	12.04	604.0
38	20.980	.36000	2099.0	.5900-01	.7110-01	.8040-01	.9220	.4105-02	.3010-02	.6600	4.379	530.7
38	23.070	.35500	2094.0	.6530-01	.7970-01	.9090-01	.9220	.4640-02	.3335-02	.6940	4.576	542.0
38	23.070	.36000	2095.0	.7070-01	.8550-01	.9690-01	.9220	.4947-02	.3608-02	.7790	5.164	533.9
38	23.070	.36500	2096.0	.6250-01	.7510-01	.8460-01	.9220	.4319-02	.3190-02	.7140	4.748	526.2
37	23.070	.43500	2000.0	.1158	.1464	.1717	.9220	.8760-02	.5910-02	1.059	6.718	568.0
37	23.070	.56890	2001.0	.7440-01	.9250-01	.1071	.9220	.5466-02	.3796-02	.7240	4.933	556.4
37	23.070	.70270	2002.0	.5490-01	.6740-01	.7740-01	.9220	.3947-02	.2800-02	.5620	4.006	546.6
37	23.070	.83500	2003.0	.3530-01	.4320-01	.4940-01	.9220	.2518-02	.1799-02	.3670	2.338	543.2
37	23.070	.90000	2004.0	.8800-01	.1121	.1324	.9220	.6754-02	.4488-02	.7800	5.171	573.5
38	23.070	.92600	2154.0	.2264	.2973	.3605	.9220	.1840-01	.1156-01	1.818	12.67	592.6

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT17)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
18	29.800	.70000-01	700.00	.3298	.4104	.4125	.9490	.2103-01	.1682-01	3.167	21.37	551.2
18	29.800	.10000+00	701.00	.2280	.2779	.2902	.9404	.1480-01	.1162-01	2.390	15.34	533.9
18	29.800	.15000	702.00	.1419	.1718	.1878	.9297	.9576-02	.7236-02	1.539	11.12	526.8
18	29.800	.20000	703.00	.7010-01	.8380-01	.9350-01	.9236	.4766-02	.3573-02	.8070	5.469	513.6
18	29.800	.30000	704.00	.5160-01	.6300-01	.7180-01	.9220	.3662-02	.2631-02	.5390	3.841	534.7
18	29.800	.35000	705.00	.8830-01	.1084	.1243	.9220	.6340-02	.4501-02	.8960	6.150	540.6
38	29.800	.35500	2090.0	.9670-01	.1196	.1379	.9220	.7036-02	.4936-02	.9670	6.345	554.0
38	29.800	.36500	2092.0	.8800-01	.1082	.1241	.9220	.6334-02	.4493-02	.9040	5.930	548.7
38	29.800	.37000	2093.0	.6360-01	.7750-01	.8830-01	.9220	.4508-02	.3248-02	.6800	4.487	540.7
20	29.800	.50000	707.00	.1140	.1436	.1680	.9220	.8566-02	.5815-02	1.047	7.113	561.2
20	29.800	.60000	708.00	.8860-01	.1088	.1248	.9220	.6362-02	.4521-02	.9030	5.771	541.5
20	29.800	.70000	709.00	.4390-01	.5360-01	.6110-01	.9220	.3116-02	.2241-02	.4620	2.960	535.2
20	29.800	.80000	710.00	.3590-01	.4350-01	.4940-01	.9220	.2519-02	.1832-02	.3890	2.445	529.0
38	31.430	.44000	2166.0	.2121	.2700	.3188	.9220	.1627-01	.1082-01	1.892	12.39	575.2
37	31.430	.47600	2005.0	.1543	.1967	.2324	.9220	.1186-01	.7875-02	1.367	8.955	573.7
37	31.430	.51100	2006.0	.1131	.1427	.1671	.9220	.8524-02	.5771-02	1.041	7.058	566.8
37	31.430	.54600	2007.0	.4610-01	.5790-01	.6750-01	.9220	.3445-02	.2353-02	.4320	3.009	563.4
37	31.430	.61600	2009.0	.1166	.1460	.1701	.9220	.8678-02	.5949-02	1.102	7.489	561.9
37	31.430	.65000	2010.0	.7770-01	.9550-01	.1095	.9220	.5586-02	.3964-02	.7950	5.529	546.6
37	31.430	.68600	2014.0	.4800-01	.5890-01	.6750-01	.9220	.3446-02	.2449-02	.4930	3.443	545.8
37	31.430	.72050	2015.0	.2850-01	.3500-01	.4010-01	.9220	.2046-02	.1455-02	.2930	2.177	545.5
37	31.430	.79040	2017.0	.5230-01	.6390-01	.7310-01	.9220	.3727-02	.2666-02	.5460	3.456	542.5
37	31.430	.86000	2019.0	.1080-01	.1310-01	.1490-01	.9220	.7592-03	.5500-03	.1160	.7550	535.7
37	31.430	.89520	2020.0	.6800-01	.8530-01	.9940-01	.9220	.5072-02	.3470-02	.6400	4.132	562.7
38	31.430	.92600	2153.0	.1932	.2510	.3014	.9220	.1538-01	.9861-02	1.607	11.49	587.0
37	33.750	.25000	2079.0	.5040-01	.6180-01	.7080-01	.9220	.3612-02	.2571-02	.5200	4.272	545.0
37	33.750	.30000	2080.0	.6600-01	.8080-01	.9230-01	.9220	.4711-02	.3366-02	.6870	4.533	543.0
37	33.750	.37500	2081.0	.7410-01	.9100-01	.1044	.9220	.5325-02	.3779-02	.7580	5.037	546.5
37	33.750	.40000	2082.0	.1114	.1420	.1679	.9220	.8563-02	.5685-02	.9860	6.458	573.8
37	33.750	.43000	2083.0	.2112	.2683	.3161	.9220	.1613-01	.1078-01	1.893	12.41	571.6
37	33.750	.45000	2084.0	.1935	.2449	.2877	.9220	.1468-01	.9871-02	1.757	11.54	569.2
37	33.750	.60000	2085.0	.9820-01	.1214	.1399	.9220	.7137-02	.5011-02	.9810	6.496	551.6
38	33.750	.65000	2086.0	.8800-01	.1074	.1225	.9220	.6254-02	.4493-02	.9340	6.271	542.2
38	33.750	.92600	2152.0	.1848	.2392	.2865	.9220	.1462-01	.9430-02	1.554	11.12	585.2
37	36.320	.25000	2066.0	.1315	.1646	.1917	.9220	.9781-02	.6708-02	1.245	8.205	561.7
37	36.320	.30000	2067.0	.6410-01	.7870-01	.9010-01	.9220	.4598-02	.3271-02	.6610	4.352	545.3
37	36.320	.35000	2069.0	.7510-01	.9240-01	.1061	.9220	.5413-02	.3833-02	.7650	5.080	547.6
37	36.320	.37500	2070.0	.7340-01	.9030-01	.1035	.9220	.5282-02	.3747-02	.7520	4.993	546.6
37	36.320	.40000	2071.0	.1069	.1339	.1560	.9220	.7958-02	.5456-02	1.011	6.665	561.9
37	36.320	.42000	2072.0	.1543	.1954	.2296	.9220	.1171-01	.7872-02	1.399	9.183	569.5
37	36.320	.42500	2073.0	.1729	.2196	.2588	.9220	.1320-01	.8823-02	1.550	10.17	571.5
37	36.320	.43500	2075.0	.2458	.3184	.3814	.9220	.1946-01	.1254-01	2.056	13.41	583.3
37	36.320	.60000	2077.0	.8470-01	.1042	.1197	.9220	.6105-02	.4321-02	.8620	5.775	547.7

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
37	36.320	.65000	2078.0	.8320-01	.1032	.1192	.9220	.6082-02	.4245-02	.8190	5.585	554.3
20	37.700	.50000-01	715.00	.3518	.4393	.4274	.9556	.2179-01	.1794-01	3.336	21.67	555.2
20	37.700	.70000-01	716.00	.3123	.3954	.3975	.9490	.2027-01	.1593-01	2.807	18.98	565.0
20	37.700	.10000+00	717.00	.1854	.2269	.2371	.9404	.1209-01	.9455-02	1.914	12.47	538.8
20	37.700	.15000	718.00	.1547	.1885	.2069	.9297	.1055-01	.7888-02	1.627	11.98	534.9
20	37.700	.20000	719.00	.6890-01	.8260-01	.9230-01	.9236	.4708-02	.3515-02	.7860	5.380	517.5
20	37.700	.30000	720.00	.5880-01	.7180-01	.8200-01	.9220	.4180-02	.3000-02	.6150	4.419	536.4
18	37.700	.35000	721.00	.7170-01	.8730-01	.9940-01	.9220	.5068-02	.3654-02	.7560	5.274	532.8
18	37.700	.37500	722.00	.7160-01	.8720-01	.9930-01	.9220	.5064-02	.3649-02	.7530	5.254	533.2
18	37.700	.50000	723.00	.1365	.1678	.1925	.9220	.9814-02	.6959-02	1.380	9.561	541.3
18	37.700	.60000	724.00	.8400-01	.1020	.1159	.9220	.5909-02	.4281-02	.8960	5.777	530.2
18	37.700	.70000	725.00	.5170-01	.6290-01	.7170-01	.9220	.3654-02	.2634-02	.5440	3.483	533.0
18	37.700	.80000	726.00	.4040-01	.4870-01	.5500-01	.9220	.2806-02	.2057-02	.4450	2.829	523.3
18	37.700	.87000	727.00	.7540-01	.9270-01	.1065	.9220	.5428-02	.3843-02	.7590	4.866	542.0
18	37.700	.92600	728.00	.1350	.1725	.2042	.9220	.1041-01	.6885-02	1.172	8.428	569.3
19	39.000	.10000-01	993.00	.4389	.5773	.5301	.9641	.2701-01	.2237-01	3.455	24.63	585.9
19	39.000	.25000-01	994.00	.3859	.4875	.4561	.9631	.2324-01	.1966-01	3.493	23.58	562.7
37	45.000	.25000	2036.0	.2680-01	.3250-01	.3700-01	.9220	.1887-02	.1365-02	.2880	2.340	536.4
37	45.000	.32500	2038.0	.5410-01	.6600-01	.7540-01	.9220	.3844-02	.2759-02	.5700	3.912	540.7
37	45.000	.35000	2039.0	.6070-01	.7400-01	.8450-01	.9220	.4310-02	.3095-02	.6400	4.328	540.5
37	45.000	.37500	2040.0	.5970-01	.7260-01	.8260-01	.9220	.4215-02	.3044-02	.6390	4.327	537.4
37	45.000	.40000	2041.0	.9230-01	.1131	.1294	.9220	.6600-02	.4709-02	.9580	6.467	543.8
37	45.000	.42000	2042.0	.1098	.1353	.1555	.9220	.7932-02	.5601-02	1.111	7.484	548.8
37	45.000	.42500	2043.0	.1141	.1408	.1620	.9220	.8267-02	.5822-02	1.147	7.722	550.1
37	45.000	.43000	2044.0	.1215	.1502	.1731	.9220	.8831-02	.6198-02	1.212	8.150	551.7
37	45.000	.43500	2045.0	.1226	.1515	.1746	.9220	.8906-02	.6257-02	1.226	8.246	551.3
37	45.000	.44000	2046.0	.1329	.1641	.1889	.9220	.9639-02	.6782-02	1.334	8.973	550.6
37	45.000	.45000	2047.0	.1281	.1585	.1829	.9220	.9331-02	.6533-02	1.270	8.586	552.9
37	45.000	.47000	2048.0	.1125	.1393	.1607	.9220	.8200-02	.5741-02	1.116	7.617	552.8
37	45.000	.55000	2049.0	.7290-01	.9040-01	.1044	.9220	.5324-02	.3721-02	.7200	4.930	553.6
37	45.000	.60000	2050.0	.6270-01	.7680-01	.8800-01	.9220	.4489-02	.3196-02	.6470	4.366	544.8
37	45.000	.65000	2051.0	.7810-01	.9620-01	.1105	.9220	.5639-02	.3985-02	.7920	5.271	548.5
37	45.000	.75000	2052.0	.3590-01	.4420-01	.5070-01	.9220	.2587-02	.1830-02	.3650	2.316	548.0
37	45.000	.80000	2053.0	.4180-01	.5120-01	.5860-01	.9220	.2992-02	.2133-02	.4330	2.726	544.1
37	45.000	.83000	2054.0	.4910-01	.6050-01	.6960-01	.9220	.3552-02	.2505-02	.4960	3.102	549.4
37	45.000	.84000	2055.0	.5950-01	.7380-01	.8530-01	.9220	.4354-02	.3037-02	.5850	3.652	554.6
37	45.000	.85000	2056.0	.5850-01	.7230-01	.8340-01	.9220	.4256-02	.2983-02	.5820	3.686	552.3
37	45.000	.86000	2057.0	.6060-01	.7470-01	.8590-01	.9220	.4382-02	.3093-02	.6120	3.979	549.2
37	45.000	.87000	2058.0	.6220-01	.7670-01	.8810-01	.9220	.4495-02	.3174-02	.6290	4.188	548.9
37	45.000	.88000	2059.0	.5900-01	.7300-01	.8410-01	.9220	.4292-02	.3009-02	.5870	3.899	552.2
37	45.000	.89000	2060.0	.6370-01	.7940-01	.9200-01	.9220	.4693-02	.3252-02	.6170	4.100	557.5
37	45.000	.90000	2061.0	.4190-01	.5220-01	.6050-01	.9220	.3087-02	.2140-02	.4070	2.710	557.2
37	45.000	.91000	2062.0	.3810-01	.4660-01	.5330-01	.9220	.2721-02	.1943-02	.3960	3.247	543.3

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT17)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
37	45.000	.92600	2063.0	.5220-01	.6680-01	.7920-01	.9220	.4040-02	.2665-02	.4560	3.177	575.9
37	45.000	.93500	2064.0	.6140-01	.7970-01	.9570-01	.9220	.4882-02	.3134-02	.5100	3.739	584.4
37	45.000	.94500	2065.0	.7510-01	.9380-01	.1090	.9220	.5561-02	.3832-02	.7180	4.738	559.8
18	180.00	.15000-01	2182.0	.5831	.8719	.7644	.9642	.3897-01	.2973-01	3.319	23.97	627.9
18	180.00	.20000-01	2183.0	.5192	.6944	.6377	.9632	.3252-01	.2647-01	3.879	28.78	593.0
18	180.00	.25000-01	2184.0	.4814	.6236	.5786	.9632	.2950-01	.2455-01	3.981	28.60	577.4
18	180.00	.30000-01	2185.0	.6610-01	.8100-01	.7650-01	.9630	.3902-02	.3369-02	.6740	4.905	539.4
18	180.00	.40000-01	737.00	.4143	.5249	.5002	.9592	.2551-01	.2113-01	3.710	23.99	564.0
18	180.00	.45000-01	738.00	.4262	.5405	.5197	.9574	.2650-01	.2173-01	3.801	24.94	564.6
18	180.00	.60000-01	739.00	.3384	.4275	.4224	.9523	.2154-01	.1726-01	3.064	20.44	562.0
18	180.00	.70000-01	740.00	.3039	.3829	.3848	.9491	.1962-01	.1550-01	2.778	18.66	560.3
18	180.00	.80000-01	741.00	.2492	.3122	.3185	.9460	.1624-01	.1271-01	2.330	16.86	556.2
18	180.00	.10000+00	742.00	.2125	.2632	.2757	.9405	.1406-01	.1083-01	2.079	13.88	547.7
18	180.00	.12500	743.00	.1612	.1986	.2140	.9346	.1091-01	.8218-02	1.612	11.74	543.4
18	180.00	.15000	744.00	.1288	.1575	.1730	.9298	.8823-02	.6567-02	1.334	9.324	536.4
18	180.00	.17500	745.00	.9200-01	.1116	.1243	.9261	.6339-02	.4691-02	.9860	7.478	529.3
18	180.00	.20000	746.00	.6030-01	.7270-01	.8160-01	.9236	.4160-02	.3073-02	.6650	4.812	523.3
18	180.00	.21500	747.00	.4820-01	.5870-01	.6670-01	.9226	.3399-02	.2456-02	.5070	3.535	533.3
18	180.00	.23000	748.00	.3720-01	.4540-01	.5180-01	.9221	.2641-02	.1898-02	.3890	2.893	534.7
18	180.00	.24000	749.00	.3650-01	.4460-01	.5100-01	.9220	.2600-02	.1859-02	.3770	2.854	537.1
18	180.00	.25000	750.00	.1770-01	.2170-01	.2480-01	.9220	.1263-02	.9029-03	.1830	1.486	537.2
18	180.00	.30000	751.00	.4250-01	.5200-01	.5950-01	.9220	.3035-02	.2165-02	.4360	2.870	538.4
18	180.00	.35000	752.00	.4340-01	.5280-01	.6010-01	.9220	.3065-02	.2214-02	.4600	2.929	531.8
18	180.00	.40000	753.00	.4830-01	.5870-01	.6670-01	.9220	.3403-02	.2460-02	.5120	3.321	531.3
18	180.00	.50000	754.00	.6150-01	.7520-01	.8600-01	.9220	.4384-02	.3134-02	.6340	4.167	537.3
18	180.00	.60000	755.00	.4440-01	.5430-01	.6210-01	.9220	.3165-02	.2262-02	.4570	2.947	537.3
18	180.00	.70000	756.00	.4350-01	.5340-01	.6130-01	.9220	.3125-02	.2218-02	.4410	2.920	540.7
18	180.00	.80000	757.00	.3910-01	.4780-01	.5450-01	.9220	.2780-02	.1994-02	.4070	2.563	535.6
18	180.00	.90000	758.00	.1990-01	.2450-01	.2820-01	.9220	.1437-02	.1016-02	.2000	1.295	542.8
18	235.00	.22000	759.00	.4610-01	.5630-01	.6400-01	.9224	.3265-02	.2353-02	.4830	3.618	534.2
18	235.00	.25000	760.00	.2010-01	.2440-01	.2780-01	.9220	.1419-02	.1023-02	.2120	1.671	532.6
18	235.00	.27000	761.00	.1230-01	.1500-01	.1700-01	.9220	.8687-03	.6258-03	.1290	.9670	533.2
18	235.00	.30000	762.00	.4710-01	.5760-01	.6570-01	.9220	.3350-02	.2403-02	.4910	2.967	535.4
18	235.00	.32000	763.00	.5610-01	.6870-01	.7850-01	.9220	.4005-02	.2861-02	.5780	3.437	537.5
18	235.00	.34000	764.00	.5890-01	.7220-01	.8250-01	.9220	.4208-02	.3005-02	.6070	3.616	537.7
18	235.00	.36000	765.00	.7500-01	.9220-01	.1058	.9220	.5396-02	.3825-02	.7580	4.572	541.3
18	235.00	.38000	766.00	.8640-01	.1072	.1240	.9220	.6322-02	.4405-02	.8380	5.087	549.3
20	247.00	.23000	768.00	.4470-01	.5460-01	.6230-01	.9221	.3175-02	.2282-02	.4680	3.503	536.0
20	247.00	.25000	769.00	.2120-01	.2580-01	.2940-01	.9220	.1499-02	.1084-02	.2260	1.770	532.6
20	247.00	.27000	770.00	.1840-01	.2260-01	.2590-01	.9220	.1322-02	.9389-03	.1870	1.369	541.8
20	247.00	.30000	772.00	.6910-01	.8540-01	.9840-01	.9220	.5017-02	.3526-02	.6860	4.194	546.6
20	247.00	.31000	773.00	.7550-01	.9330-01	.1074	.9220	.5477-02	.3852-02	.7510	4.553	546.3
20	247.00	.32000	774.00	.8960-01	.1111	.1285	.9220	.6551-02	.4569-02	.8730	5.239	550.1

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT17)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
20	247.00	.32500	775.00	.9610-01	.1198	.1390	.9220	.7090-02	.4899-02	.9170	5.506	554.1
20	247.00	.33000	776.00	.1051	.1319	.1539	.9220	.7850-02	.5358-02	.9760	5.863	559.1
20	247.00	.33500	777.00	.1178	.1492	.1752	.9220	.8937-02	.6010-02	1.061	6.357	564.6
20	247.00	.34000	778.00	.1213	.1538	.1809	.9220	.9224-02	.6187-02	1.086	6.504	565.6
20	247.00	.34500	779.00	.1354	.1728	.2044	.9220	.1042-01	.6907-02	1.184	7.092	569.8
20	247.00	.35000	780.00	.1399	.1781	.2101	.9220	.1072-01	.7137-02	1.235	7.429	568.1
20	247.00	.35500	781.00	.1380	.1762	.2086	.9220	.1064-01	.7039-02	1.203	7.248	570.3
18	247.00	.36000	782.00	.1313	.1659	.1947	.9220	.9926-02	.6697-02	1.188	7.183	562.2
18	247.00	.36500	783.00	.1206	.1513	.1765	.9220	.8998-02	.6152-02	1.122	6.783	557.2
18	247.00	.37000	784.00	.1110	.1385	.1608	.9220	.8197-02	.5659-02	1.054	6.421	553.3
18	247.00	.37500	785.00	.9670-01	.1203	.1394	.9220	.7107-02	.4931-02	.9290	5.711	551.2
18	247.00	.38000	786.00	.8650-01	.1072	.1239	.9220	.6315-02	.4408-02	.8420	5.199	548.5
18	247.00	.39000	787.00	.7540-01	.9270-01	.1065	.9220	.5428-02	.3844-02	.7600	4.722	541.8
18	247.00	.40000	788.00	.5970-01	.7300-01	.8330-01	.9220	.4250-02	.3045-02	.6190	3.891	536.1
19	247.00	.50000	789.00	.3580-01	.4340-01	.4930-01	.9220	.2513-02	.1825-02	.3850	2.489	529.5
19	247.00	.60000	790.00	.3410-01	.4180-01	.4770-01	.9220	.2433-02	.1740-02	.3530	2.325	537.7
19	247.00	.70000	791.00	.3790-01	.4710-01	.5450-01	.9220	.2777-02	.1932-02	.3670	2.584	550.6
19	247.00	.80000	792.00	.3040-01	.3760-01	.4330-01	.9220	.2206-02	.1549-02	.3000	1.886	546.6
19	247.00	.90000	793.00	.2250-01	.2830-01	.3300-01	.9220	.1682-02	.1146-02	.2080	1.331	559.1
38	247.00	.92600	2144.0	.2010-01	.2740-01	.3430-01	.9220	.1751-02	.1028-02	.1460	.9880	608.3
38	247.00	.93000	2149.0	.2430-01	.3360-01	.4280-01	.9220	.2182-02	.1238-02	.1670	1.169	614.8
38	250.57	.93700	2087.0	.3168	.4303	.5382	.9220	.2747-01	.1617-01	2.299	15.90	607.8
19	258.00	.27000	794.00	.1630-01	.1990-01	.2270-01	.9220	.1157-02	.8326-03	.1720	1.232	534.2
19	258.00	.29000	795.00	.6510-01	.8040-01	.9260-01	.9220	.4719-02	.3319-02	.6460	3.984	545.7
36	258.00	.32000	798.00	.1621	.2136	.2599	.9220	.1325-01	.8261-02	1.271	7.506	588.7
36	258.00	.34000	802.00	.2071	.2741	.3349	.9220	.1707-01	.1055-01	1.602	9.472	590.8
36	258.00	.34500	803.00	.2013	.2622	.3157	.9220	.1609-01	.1026-01	1.640	9.767	582.7
36	258.00	.35500	805.00	.1673	.2144	.2545	.9220	.1297-01	.8528-02	1.442	8.624	573.5
36	258.00	.36000	806.00	.1392	.1788	.2128	.9220	.1085-01	.7094-02	1.188	7.117	575.2
36	258.00	.36500	807.00	.1294	.1658	.1968	.9220	.1003-01	.6596-02	1.116	6.711	573.4
36	258.00	.37000	808.00	.1187	.1506	.1773	.9220	.9035-02	.6052-02	1.062	6.423	567.1
36	258.00	.37500	809.00	.1048	.1315	.1534	.9220	.7817-02	.5341-02	.9770	5.932	559.7
36	258.00	.38000	810.00	.8460-01	.1051	.1215	.9220	.6195-02	.4315-02	.8230	5.047	551.8
19	258.00	.40000	812.00	.3310-01	.4030-01	.4580-01	.9220	.2331-02	.1689-02	.3540	2.199	530.8
19	270.00	.40000-01	985.00	.3965	.5012	.4781	.9592	.2436-01	.2021-01	3.581	23.11	563.1
19	270.00	.50000-01	986.00	.4119	.5211	.5060	.9556	.2578-01	.2099-01	3.708	23.78	563.7
19	270.00	.60000-01	987.00	.3569	.4460	.4411	.9522	.2248-01	.1818-01	3.369	22.08	555.1
19	270.00	.70000-01	988.00	.3174	.3963	.3983	.9490	.2029-01	.1617-01	3.006	20.12	554.5
19	270.00	.80000-01	989.00	.2713	.3370	.3437	.9460	.1751-01	.1382-01	2.623	18.55	550.6
19	270.00	.10000+00	990.00	.2148	.2640	.2761	.9404	.1407-01	.1095-01	2.175	14.22	541.7
19	270.00	.15000	991.00	.1161	.1416	.1554	.9297	.7917-02	.5916-02	1.217	8.992	534.6
19	270.00	.20000	992.00	.6590-01	.7950-01	.8920-01	.9236	.4544-02	.3357-02	.7280	4.979	523.6
19	270.00	.23000	813.00	.4350-01	.5310-01	.6050-01	.9221	.3083-02	.2217-02	.4550	3.332	534.9

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
19	270.00	.24000	814.00	.3430-01	.4200-01	.4790-01	.9220	.2441-02	.1749-02	.3560	2.898	536.6
19	270.00	.25000	815.00	.1990-01	.2420-01	.2760-01	.9220	.1406-02	.1014-02	.2100	1.669	533.2
19	270.00	.27000	816.00	.1600-01	.1950-01	.2220-01	.9220	.1130-02	.8153-03	.1690	1.209	533.2
19	270.00	.29000	817.00	.1065	.1344	.1575	.9220	.8026-02	.5425-02	.9670	5.963	562.1
19	270.00	.30000	818.00	.2292	.2965	.3550	.9220	.1809-01	.1168-01	1.903	11.46	577.4
19	270.00	.31000	819.00	.2532	.3278	.3925	.9220	.2000-01	.1290-01	2.098	12.52	577.7
19	270.00	.32000	820.00	.2416	.3115	.3716	.9220	.1894-01	.1231-01	2.031	12.11	575.3
19	270.00	.32500	821.00	.2415	.3119	.3727	.9220	.1899-01	.1231-01	2.019	12.00	576.3
19	270.00	.33000	822.00	.2807	.3678	.4452	.9220	.2268-01	.1430-01	2.236	13.27	584.0
19	270.00	.33500	823.00	.3111	.4150	.5106	.9220	.2602-01	.1585-01	2.342	13.88	592.6
19	270.00	.34500	825.00	.3079	.3938	.4668	.9220	.2378-01	.1569-01	2.662	15.90	570.7
19	270.00	.35000	826.00	.2825	.3655	.4375	.9220	.2229-01	.1439-01	2.346	13.97	577.4
19	270.00	.36000	828.00	.2764	.3684	.4527	.9220	.2307-01	.1408-01	2.089	12.31	592.0
19	270.00	.37000	830.00	.2070-01	.2510-01	.2860-01	.9220	.1455-02	.1053-02	.2200	1.345	531.3
19	270.00	.37500	831.00	.9140-01	.1120	.1281	.9220	.6529-02	.4656-02	.9380	5.737	539.0
19	270.00	.38000	832.00	.5480-01	.6660-01	.7560-01	.9220	.3853-02	.2793-02	.5860	3.603	530.5
19	270.00	.39000	833.00	.4550-01	.5520-01	.6280-01	.9220	.3197-02	.2318-02	.4870	3.025	530.4
19	270.00	.40000	834.00	.5720-01	.6970-01	.7930-01	.9220	.4041-02	.2916-02	.6040	3.761	533.1
19	270.00	.50000	835.00	.2030-01	.2470-01	.2810-01	.9220	.1432-02	.1036-02	.2160	1.375	531.8
19	270.00	.60000	836.00	.5430-01	.6670-01	.7640-01	.9220	.3894-02	.2768-02	.5530	3.696	540.5
19	270.00	.70000	837.00	.5360-01	.6660-01	.7700-01	.9220	.3922-02	.2732-02	.5200	3.657	550.0
19	270.00	.80000	838.00	.6190-01	.7640-01	.8800-01	.9220	.4486-02	.3154-02	.6130	3.813	545.9
19	270.00	.90000	839.00	.6310-01	.7990-01	.9380-01	.9220	.4782-02	.3217-02	.5670	3.597	563.9
38	270.00	.92600	2141.0	.1557	.2126	.2674	.9220	.1365-01	.7947-02	1.113	7.382	609.9
38	270.00	.93000	2146.0	.1913	.2642	.3359	.9220	.1714-01	.9766-02	1.328	9.068	614.0
38	270.00	.93500	2150.0	.1817	.2411	.2952	.9220	.1507-01	.9272-02	1.410	9.707	597.9
38	289.43	.92600	2140.0	.1846	.2439	.2975	.9220	.1518-01	.9422-02	1.452	9.915	595.8
38	289.43	.93800	2145.0	.3184	.4334	.5434	.9220	.2773-01	.1625-01	2.297	15.88	608.7
19	292.50	.23800	840.00	.4210-01	.5140-01	.5860-01	.9221	.2988-02	.2144-02	.4380	3.549	536.2
19	292.50	.25000	841.00	.2120-01	.2580-01	.2940-01	.9220	.1499-02	.1081-02	.2240	1.745	533.4
19	292.50	.27000	842.00	.1240-01	.1510-01	.1720-01	.9220	.8757-03	.6335-03	.1320	.9320	531.6
19	292.50	.35000	845.00	.1829	.2310	.2710	.9220	.1381-01	.9317-02	1.655	10.06	562.8
19	292.50	.37000	846.00	.1182	.1459	.1679	.9220	.8555-02	.6021-02	1.174	7.240	545.4
19	292.50	.40000	847.00	.5710-01	.6910-01	.7840-01	.9220	.3994-02	.2907-02	.6170	3.882	528.1
19	292.50	.45000	848.00	.3770-01	.4550-01	.5150-01	.9220	.2623-02	.1922-02	.4150	2.641	524.2
19	292.50	.50000	849.00	.3680-01	.4710-01	.5360-01	.9220	.2729-02	.1976-02	.4130	2.678	531.2
19	292.50	.60000	851.00	.3970-01	.4840-01	.5520-01	.9220	.2810-02	.2021-02	.4160	2.802	534.7
19	292.50	.65000	852.00	.7160-01	.8810-01	.1012	.9220	.5156-02	.3648-02	.7200	4.907	543.0
19	292.50	.70000	853.00	.9500-01	.1184	.1374	.9220	.7002-02	.4841-02	.9060	6.336	553.2
19	292.50	.75000	854.00	.6450-01	.7970-01	.9190-01	.9220	.4682-02	.3286-02	.6360	4.129	546.7
19	292.50	.86000	855.00	.8080-01	.9940-01	.1141	.9220	.5815-02	.4116-02	.8140	5.305	542.6
38	292.50	.82000	2129.0	.7420-01	.9120-01	.1047	.9220	.5342-02	.3786-02	.7600	4.654	549.1
38	292.50	.83000	2130.0	.7480-01	.9230-01	.1062	.9220	.5419-02	.3819-02	.7570	4.663	551.9

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
38	292.50	.85000	2132.0	.7700-01	.9530-01	.1099	.9220	.5607-02	.3929-02	.7680	4.751	554.6
38	292.50	.86000	2133.0	.7410-01	.9190-01	.1062	.9220	.5422-02	.3781-02	.7310	4.495	556.7
38	292.50	.87000	2134.0	.7400-01	.9220-01	.1069	.9220	.5456-02	.3779-02	.7190	4.441	559.6
38	292.50	.88000	2135.0	.7640-01	.9550-01	.1111	.9220	.5668-02	.3897-02	.7290	4.496	562.8
19	292.50	.89000	2136.0	.1015	.1276	.1491	.9220	.7608-02	.5181-02	.9500	5.861	566.6
38	292.50	.90000	856.00	.1365	.1732	.2039	.9220	.1039-01	.6955-02	1.215	7.806	565.7
38	292.50	.92600	2138.0	.1013	.1313	.1574	.9220	.8032-02	.5172-02	.8500	5.831	585.7
38	292.50	.93000	2139.0	.1742	.2294	.2788	.9220	.1423-01	.9893-02	1.387	9.725	594.0
38	301.50	.82000	2116.0	.5320-01	.6580-01	.7570-01	.9220	.3865-02	.2718-02	.5360	3.273	552.9
38	301.50	.83000	2117.0	.5920-01	.7330-01	.8450-01	.9220	.4310-02	.3023-02	.5920	3.594	554.2
38	301.50	.83500	2118.0	.5310-01	.6590-01	.7610-01	.9220	.3884-02	.2713-02	.5260	3.166	556.0
38	301.50	.84000	2119.0	.5560-01	.6890-01	.7960-01	.9220	.4063-02	.2836-02	.5500	3.334	556.2
38	301.50	.85000	2120.0	.5290-01	.6570-01	.7610-01	.9220	.3882-02	.2701-02	.5200	3.158	557.6
38	301.50	.86000	2021.0	.5710-01	.7120-01	.8260-01	.9220	.4218-02	.2916-02	.5530	3.373	560.4
38	301.50	.87000	2122.0	.5140-01	.6390-01	.7400-01	.9220	.3775-02	.2624-02	.5040	3.069	558.1
38	301.50	.88000	2123.0	.5530-01	.6940-01	.8100-01	.9220	.4132-02	.2824-02	.5220	3.186	565.2
38	301.50	.89000	2124.0	.6630-01	.8350-01	.9760-01	.9220	.4982-02	.3383-02	.6160	3.790	567.8
38	301.50	.90000	2125.0	.7270-01	.9180-01	.1076	.9220	.5492-02	.3710-02	.6690	4.143	569.7
38	301.50	.92600	2127.0	.6110-01	.7860-01	.9360-01	.9220	.4779-02	.3118-02	.5250	3.232	581.7
38	301.50	.93500	2128.0	.6680-01	.8520-01	.1007	.9220	.5140-02	.3412-02	.5940	3.944	576.0
38	305.40	.82000	2113.0	.4230-01	.5200-01	.5970-01	.9220	.3047-02	.2158-02	.4330	2.633	549.5
38	305.40	.83000	2114.0	.4330-01	.5350-01	.6160-01	.9220	.3145-02	.2209-02	.4340	2.637	553.4
38	305.40	.83500	2115.0	.3740-01	.4680-01	.5450-01	.9220	.2783-02	.1909-02	.3560	2.167	563.7
19	305.40	.84000	857.00	.5610-01	.6960-01	.8040-01	.9220	.4096-02	.2859-02	.5470	3.376	549.1
36	305.40	.85000	858.00	.5790-01	.7200-01	.8340-01	.9220	.4253-02	.2952-02	.5590	3.462	553.2
36	305.40	.86000	859.00	.5830-01	.7250-01	.8400-01	.9220	.4280-02	.2972-02	.5640	3.521	553.0
36	305.40	.87000	860.00	.5780-01	.7190-01	.8330-01	.9220	.4244-02	.2947-02	.5590	3.502	552.9
36	305.40	.88000	861.00	.6930-01	.8620-01	.9990-01	.9220	.5090-02	.3534-02	.6690	4.193	553.1
36	305.40	.89000	862.00	.8150-01	.1020	.1187	.9220	.6049-02	.4156-02	.7690	4.836	557.5
36	305.40	.90000	863.00	.7380-01	.9220-01	.1071	.9220	.5458-02	.3763-02	.7020	4.440	556.1
36	305.40	.91000	864.00	.7270-01	.9070-01	.1054	.9220	.5370-02	.3706-02	.6930	5.012	555.7
36	305.40	.92600	865.00	.1141	.1453	.1717	.9220	.8751-02	.5814-02	1.003	7.186	570.0
36	309.30	.80000	866.00	.4470-01	.5500-01	.6330-01	.9220	.3225-02	.2276-02	.4480	2.819	545.7
36	309.30	.81000	867.00	.4590-01	.5680-01	.6540-01	.9220	.3334-02	.2341-02	.4550	2.843	548.1
36	309.30	.82000	868.00	.3810-01	.4710-01	.5420-01	.9220	.2765-02	.1941-02	.3770	2.355	548.2
36	309.30	.83000	869.00	.3650-01	.4540-01	.5250-01	.9220	.2678-02	.1859-02	.3520	2.199	553.2
38	309.30	.83500	2112.0	.2320-01	.2910-01	.3380-01	.9220	.1726-02	.1185-02	.2210	1.343	563.1
36	315.00	.50000-01	871.00	.4037	.5139	.4986	.9556	.2541-01	.2058-01	3.563	22.52	569.4
36	315.00	.60000-01	872.00	.3416	.4321	.4270	.9523	.2177-01	.1741-01	3.085	20.30	565.4
19	315.00	.70000-01	873.00	.3152	.3917	.3935	.9490	.2005-01	.1606-01	3.044	20.67	550.8
19	315.00	.10000+00	875.00	.2118	.2590	.2706	.9404	.1379-01	.1079-01	2.192	14.46	537.2
19	315.00	.15000	876.00	.1188	.1442	.1579	.9297	.8047-02	.6055-02	1.272	9.389	530.2
19	315.00	.20000	877.00	.6120-01	.7370-01	.8260-01	.9236	.4207-02	.3117-02	.6810	4.648	521.9

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT17)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
19	315.00	.35000	878.00	.6130-01	.7480-01	.8540-01	.9220	.4349-02	.3126-02	.6420	4.011	535.1
19	315.00	.40000	879.00	.1590-01	.1710-01	.1790-01	.9220	.9101-03	.8100-03	.4250	3.236	215.4
19	315.00	.50000	880.00	.8010-01	.9880-01	.1137	.9220	.5792-02	.4081-02	.7980	5.484	544.9
19	315.00	.55000	881.00	.7700-01	.9540-01	.1101	.9220	.5611-02	.3923-02	.7530	5.011	548.4
19	315.00	.60000	882.00	.8420-01	.1041	.1199	.9220	.6111-02	.4289-02	.8310	5.582	546.7
19	315.00	.65000	883.00	.6350-01	.7810-01	.8960-01	.9220	.4564-02	.3238-02	.6430	4.401	541.7
19	315.00	.70000	884.00	.4520-01	.5550-01	.6370-01	.9220	.3246-02	.2302-02	.4570	3.258	541.8
19	315.00	.75000	885.00	.3020-01	.3700-01	.4230-01	.9220	.2158-02	.1540-02	.3100	1.965	538.7
19	315.00	.80000	886.00	.3880-01	.4750-01	.5430-01	.9220	.2765-02	.1976-02	.4000	2.525	537.9
19	315.00	.84000	887.00	.4260-01	.5280-01	.6100-01	.9220	.3111-02	.2170-02	.4140	2.600	549.4
36	315.00	.85000	888.00	.5360-01	.6710-01	.7810-01	.9220	.3983-02	.2731-02	.5030	3.171	558.3
36	315.00	.87000	890.00	.5630-01	.7010-01	.8130-01	.9220	.4142-02	.2869-02	.5410	3.425	554.1
36	315.00	.88000	R91.00	.5830-01	.7280-01	.8470-01	.9220	.4315-02	.2972-02	.5530	3.519	556.4
36	315.00	.89000	892.00	.5400-01	.6760-01	.7870-01	.9220	.4011-02	.2755-02	.5100	3.297	557.6
36	315.00	.90000	893.00	.3580-01	.4490-01	.5230-01	.9220	.2667-02	.1826-02	.3350	2.195	558.9
36	315.00	.91000	894.00	.2070-01	.2570-01	.2980-01	.9220	.1521-02	.1054-02	.1990	1.445	554.0
36	315.00	.92600	895.00	.5820-01	.7490-01	.8920-01	.9220	.4546-02	.2966-02	.4940	3.542	575.9
36	322.30	.42000	897.00	.8160-01	.1011	.1167	.9220	.5950-02	.4159-02	.8000	5.137	550.1
36	322.30	.43500	898.00	.1240	.1549	.1801	.9220	.9180-02	.6321-02	1.175	7.309	556.6
36	322.30	.45000	899.00	.1197	.1494	.1734	.9220	.8838-02	.6102-02	1.141	7.435	555.5
36	322.30	.50000	900.00	.1217	.1523	.1773	.9220	.9038-02	.6203-02	1.146	7.589	557.9
36	322.30	.60000	901.00	.7200-01	.8910-01	.1028	.9220	.5238-02	.3670-02	.7100	4.712	549.0
38	324.45	.41000	2110.0	.7220-01	.8870-01	.1018	.9220	.5194-02	.3685-02	.7420	4.672	548.6
38	324.45	.92600	2164.0	.6960-01	.9000-01	.1076	.9220	.5494-02	.3551-02	.5870	4.096	584.6
38	326.85	.40000	2107.0	.6320-01	.7720-01	.8810-01	.9220	.4496-02	.3226-02	.6680	4.218	542.9
38	326.85	.40500	2108.0	.7270-01	.8900-01	.1019	.9220	.5198-02	.3709-02	.7570	4.773	545.9
37	326.85	.44000	2021.0	.1055	.1316	.1528	.9220	.7794-02	.5385-02	1.015	6.416	558.6
37	326.85	.54600	2024.0	.4300-01	.5360-01	.6230-01	.9220	.3176-02	.2193-02	.4130	2.749	559.0
37	326.85	.58100	2025.0	.6610-01	.8220-01	.9530-01	.9220	.4860-02	.3371-02	.6410	4.463	557.0
37	326.85	.61600	2026.0	.6310-01	.7850-01	.9080-01	.9220	.4633-02	.3221-02	.6160	4.264	556.0
37	326.85	.65200	2027.0	.7190-01	.8940-01	.1035	.9220	.5280-02	.3670-02	.7020	4.855	556.1
37	326.85	.68600	2028.0	.5720-01	.7100-01	.8200-01	.9220	.4184-02	.2918-02	.5620	3.931	554.5
37	326.85	.72260	2029.0	.3430-01	.4230-01	.4880-01	.9220	.2489-02	.1749-02	.3430	2.384	551.3
37	326.85	.75790	2030.0	.2700-01	.3320-01	.3810-01	.9220	.1944-02	.1377-02	.2750	1.759	547.3
37	326.85	.79310	2031.0	.4390-01	.5430-01	.6250-01	.9220	.3187-02	.2242-02	.4410	2.756	550.7
37	326.85	.82830	2032.0	.4540-01	.5620-01	.6480-01	.9220	.3306-02	.2314-02	.4500	2.832	553.0
37	326.85	.86350	2033.0	.8020-01	.1004	.1168	.9220	.5960-02	.4091-02	.7600	4.729	561.4
37	326.85	.90000	2034.0	.6480-01	.8240-01	.9720-01	.9220	.4959-02	.3308-02	.5790	3.553	572.2
38	326.85	.92600	2163.0	.8600-01	.1115	.1338	.9220	.6829-02	.4389-02	.7180	5.006	586.3
37	326.85	.93390	2035.0	.1208	.1604	.1965	.9220	.1003-01	.6162-02	.9320	6.094	596.0
38	330.20	.40000	2104.0	.7800-01	.9560-01	.1094	.9220	.5581-02	.3983-02	.8130	5.130	545.7
38	330.20	.40500	2105.0	.8430-01	.1034	.1185	.9220	.6048-02	.4302-02	.8710	5.491	547.4
38	330.20	.41000	2106.0	.8880-01	.1093	.1256	.9220	.6409-02	.4534-02	.9060	5.686	550.1

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
36	330.20	.42000	905.00	.9120-01	.1131	.1307	.9220	.6663-02	.4646-02	.8890	5.722	551.2
36	330.20	.43500	906.00	.9430-01	.1176	.1365	.9220	.6959-02	.4808-02	.9010	5.818	555.2
36	330.20	.45000	907.00	.1005	.1256	.1461	.9220	.7445-02	.5121-02	.9500	6.168	557.0
36	330.20	.50000	908.00	.9850-01	.1234	.1437	.9220	.7323-02	.5021-02	.9250	6.580	558.3
36	330.20	.60000	909.00	.7020-01	.8690-01	.1002	.9220	.5106-02	.3579-02	.6930	4.531	548.9
36	330.20	.70000	910.00	.5940-01	.7350-01	.8470-01	.9220	.4316-02	.3030-02	.5890	3.966	548.2
36	330.20	.80000	911.00	.3160-01	.3870-01	.4440-01	.9220	.2262-02	.1609-02	.3230	2.075	541.9
38	330.20	.87000	912.00	.1050-01	.1280-01	.1460-01	.9220	.7426-03	.5329-03	.1090	.7020	537.4
38	334.98	.92600	2162.0	.1120	.1457	.1752	.9220	.8940-02	.5715-02	.9270	6.434	587.8
36	334.98	.92600	2161.0	.1465	.1930	.2347	.9220	.1198-01	.7478-02	1.164	8.030	594.3
36	334.98	.93500	913.00	.1432	.1913	.2358	.9220	.1202-01	.7297-02	1.076	7.637	595.1
36	337.50	.94500	914.00	.3990-01	.4910-01	.5630-01	.9220	.2870-02	.2035-02	.4050	2.923	543.4
36	337.50	.40000-01	915.00	.4264	.5443	.5179	.9592	.2640-01	.2173-01	3.727	23.33	571.1
36	337.50	.50000-01	916.00	.4063	.5168	.5015	.9556	.2556-01	.2071-01	3.596	22.94	568.9
36	337.50	.70000-01	918.00	.2895	.3625	.3642	.9490	.1857-01	.1476-01	2.722	18.81	558.1
36	337.50	.80000-01	919.00	.2623	.3269	.3335	.9460	.1700-01	.1337-01	2.512	17.07	554.7
36	337.50	.10000+00	920.00	.2011	.2477	.2591	.9405	.1321-01	.1025-01	2.022	13.52	545.3
36	337.50	.15000	921.00	.1222	.1492	.1639	.9298	.8351-02	.6229-02	1.279	9.311	537.3
36	337.50	.20000	922.00	.5720-01	.6940-01	.7810-01	.9236	.3981-02	.2917-02	.6190	4.159	530.3
38	337.50	.42000	923.00	.1106	.1388	.1619	.9220	.8254-02	.5639-02	1.031	6.681	559.8
36	337.50	.42500	2167.0	.1116	.1386	.1605	.9220	.8189-02	.5694-02	1.093	7.011	558.0
36	337.50	.43500	924.00	.1075	.1344	.1563	.9220	.7965-02	.5479-02	1.017	6.617	557.0
36	337.50	.85000	926.00	.8260-01	.1028	.1191	.9220	.6071-02	.4209-02	.7950	5.124	553.7
36	337.50	.86000	927.00	.8940-01	.1102	.1266	.9220	.6454-02	.4556-02	.8970	5.824	545.6
36	337.50	.87000	928.00	.6970-01	.8710-01	.1013	.9220	.5163-02	.3554-02	.6610	4.277	556.7
36	337.50	.88000	929.00	.6140-01	.7470-01	.8510-01	.9220	.4336-02	.3127-02	.6500	4.277	534.8
36	337.50	.89000	930.00	.7760-01	.9870-01	.1164	.9220	.5933-02	.3957-02	.6880	4.481	568.6
36	337.50	.90000	931.00	.6090-01	.7770-01	.9190-01	.9220	.4684-02	.3106-02	.5340	3.557	570.7
36	337.50	.91000	932.00	.5230-01	.6650-01	.7850-01	.9220	.4001-02	.2665-02	.4630	3.348	569.0
19	337.50	.92600	933.00	.2252	.2992	.3666	.9220	.1868-01	.1148-01	1.718	12.26	590.6
19	343.12	.41500	934.00	.9550-01	.1180	.1360	.9220	.6929-02	.4865-02	.9430	6.118	546.5
19	343.12	.42000	935.00	.1021	.1270	.1471	.9220	.7494-02	.5205-02	.9840	6.422	551.3
19	343.12	.42500	936.00	.1311	.1665	.1962	.9220	.9995-02	.6681-02	1.164	7.562	566.2
19	343.12	.44500	939.00	.1592	.2044	.2431	.9220	.1239-01	.8110-02	1.356	8.889	573.1
19	343.12	.45000	940.00	.1555	.1991	.2362	.9220	.1203-01	.7923-02	1.340	8.788	571.3
19	343.12	.50000	941.00	.9240-01	.1160	.1353	.9220	.6896-02	.4706-02	.8560	5.772	558.5
19	343.12	.60000	942.00	.1079	.1344	.1559	.9220	.7942-02	.5500-02	1.033	6.639	552.6
19	343.12	.80000	944.00	.4830-01	.5950-01	.6830-01	.9220	.3481-02	.2460-02	.4840	3.165	543.5
38	345.56	.42500	2168.0	.1304	.1659	.1957	.9220	.9989-02	.6654-02	1.166	7.412	574.8
38	345.56	.92600	2160.0	.2503	.3304	.4025	.9220	.2055-01	.1277-01	1.976	13.62	595.3
19	348.00	.35000	945.00	.4270-01	.5190-01	.5900-01	.9220	.3005-02	.2176-02	.4560	2.913	530.9
19	348.00	.36000	946.00	.4430-01	.5380-01	.6120-01	.9220	.3118-02	.2256-02	.4710	3.017	531.5
19	348.00	.37000	947.00	.5540-01	.6770-01	.7720-01	.9220	.3934-02	.2825-02	.5790	3.709	535.5

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT17)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
36	348.00	.37500	948.00	.6960-01	.8620-01	.9940-01	.9220	.5068-02	.3550-02	.6870	4.371	549.2
36	348.00	.38000	949.00	.8160-01	.1012	.1169	.9220	.5960-02	.4161-02	.7990	5.124	550.7
36	348.00	.38500	950.00	.7720-01	.9560-01	.1103	.9220	.5620-02	.3935-02	.7600	4.897	549.3
36	348.00	.39000	951.00	.7180-01	.8890-01	.1026	.9220	.5229-02	.3661-02	.7070	4.580	549.4
36	348.00	.39500	952.00	.6540-01	.8100-01	.9360-01	.9220	.4769-02	.3333-02	.6410	4.090	550.2
36	348.00	.40000	953.00	.6790-01	.8420-01	.9720-01	.9220	.4956-02	.3460-02	.6640	4.311	550.7
36	348.00	.41000	955.00	.7760-01	.9700-01	.1129	.9220	.5755-02	.3954-02	.7320	4.749	557.5
36	348.00	.42000	957.00	.1088	.1379	.1622	.9220	.8265-02	.5546-02	.9760	6.344	566.5
36	348.00	.42500	958.00	.1105	.1396	.1638	.9220	.8349-02	.5631-02	1.002	6.517	564.6
36	348.00	.43000	959.00	.1433	.1866	.2246	.9220	.1145-01	.7302-02	1.168	7.509	582.6
36	348.00	.44000	960.00	.1742	.2259	.2709	.9220	.1381-01	.8876-02	1.439	9.287	580.4
36	348.00	.44500	961.00	.1810	.2327	.2770	.9220	.1412-01	.9223-02	1.540	9.963	575.6
36	348.00	.47000	965.00	.1402	.1793	.2125	.9220	.1083-01	.7147-02	1.217	8.005	572.3
36	348.00	.85000	968.00	.7660-01	.9530-01	.1105	.9220	.5632-02	.3902-02	.7360	4.755	554.0
36	348.00	.86000	969.00	.8650-01	.1087	.1269	.9220	.6467-02	.4411-02	.8040	5.193	560.4
37	348.00	.89000	972.00	.8870-01	.1145	.1368	.9220	.6981-02	.4524-02	.7490	4.889	581.6
37	348.00	.90000	973.00	.6890-01	.8960-01	.1078	.9220	.5500-02	.3513-02	.5670	3.782	585.9
37	348.00	.91000	974.00	.6320-01	.8220-01	.9880-01	.9220	.5042-02	.3224-02	.5210	3.727	585.6
37	348.00	.92600	975.00	.2877	.3973	.5050	.9220	.2576-01	.1468-01	1.989	13.95	611.7
38	354.00	.42500	2169.0	.2350-01	.2870-01	.3270-01	.9220	.1671-02	.1197-02	.2470	1.595	543.7
38	354.00	.43000	2174.0	.1209	.1555	.1852	.9220	.9455-02	.6171-02	1.040	6.588	581.5
38	354.00	.43500	2177.0	.1748	.2291	.2773	.9220	.1415-01	.8921-02	1.412	8.901	591.7
38	354.00	.44000	2179.0	.2031	.2692	.3291	.9220	.1680-01	.1037-01	1.584	9.962	597.2
38	355.16	.92600	2158.0	.3381	.4668	.5933	.9220	.3028-01	.1725-01	2.346	16.29	614.0

EXTERNAL TANK

PARAMETRIC DATA

ALPHA = .0000 BETA = 9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
21	.1000-01	9.100	4.020	72.50	741.0	175.1	.4650	5.263	2607.	.2229-03	.1410-06	4.121
22	.1000-01	9.000	4.020	72.50	733.0	173.2	.4650	5.256	2592.	.2251-03	.1394-06	4.186
23	.1000-01	9.000	4.020	72.60	735.0	173.6	.4660	5.267	2595.	.2250-03	.1398-06	4.178
39	.1000-01	9.100	4.020	72.40	748.0	176.6	.4640	5.249	2618.	.2204-03	.1422-06	4.058
40	.0000	9.000	4.020	72.50	744.0	175.9	.4650	5.258	2612.	.2217-03	.1416-06	4.091
41	.1000-01	9.000	4.020	72.30	744.0	175.7	.4640	5.247	2611.	.2215-03	.1415-06	4.088

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
21	.5101-01	.1134-01
22	.5090-01	.1127-01
23	.5097-01	.1127-01
39	.5101-01	.1142-01
40	.5102-01	.1138-01
41	.5096-01	.1138-01

TEST DATA

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
22	.00000	.25000-01	2187.0	.4008	.5614	.5119	.9621	.2606-01	.2040-01	2.614	17.94	604.7
22	.00000	.30000-01	2188.0	.3767	.5256	.4804	.9619	.2445-01	.1918-01	2.480	17.14	603.5
21	.00000	.40000-01	600.00	.3318	.4276	.4082	.9582	.2082-01	.1693-01	2.799	17.74	575.7
21	.00000	.50000-01	601.00	.2899	.3713	.3616	.9548	.1845-01	.1479-01	2.500	15.92	572.1
21	.00000	.70000-01	603.00	.2407	.3066	.3094	.9483	.1578-01	.1228-01	2.119	14.31	568.5
21	.00000	.80000-01	604.00	.2497	.3175	.3256	.9454	.1661-01	.1274-01	2.213	14.25	567.4
21	.00000	.15000	606.00	.1209	.1486	.1640	.9295	.8367-02	.6168-02	1.226	8.930	542.4
21	.00000	.20000	607.00	.6190-01	.7510-01	.8470-01	.9235	.4321-02	.3157-02	.6640	4.368	530.8
21	.00000	.21000	608.00	.5450-01	.6680-01	.7610-01	.9229	.3880-02	.2782-02	.5620	3.899	539.1
21	.00000	.22000	609.00	.4480-01	.5490-01	.6270-01	.9224	.3197-02	.2287-02	.4620	3.448	539.2
21	.00000	.30000	610.00	.4110-01	.5030-01	.5760-01	.9220	.2937-02	.2096-02	.4230	2.907	539.2
21	.00000	.35000	611.00	.4140-01	.5050-01	.5750-01	.9220	.2935-02	.2111-02	.4350	2.913	535.2

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT19)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
21	.00000	.36000	612.00	.4640-01	.5670-01	.6480-01	.9220	.3304-02	.2366-02	.4820	3.252	537.5
21	.00000	.37000	613.00	.4980-01	.6100-01	.6970-01	.9220	.3555-02	.2542-02	.5150	3.479	538.3
21	.00000	.37500	614.00	.5040-01	.6170-01	.7060-01	.9220	.3600-02	.2569-02	.5190	3.499	539.2
23	.00000	.38000	615.00	.5370-01	.6630-01	.7640-01	.9220	.3893-02	.2737-02	.5280	3.559	541.7
23	.00000	.38500	616.00	.5820-01	.7210-01	.8330-01	.9220	.4244-02	.2968-02	.5650	3.805	544.2
23	.00000	.39500	618.00	.6790-01	.8540-01	.9970-01	.9220	.5084-02	.3464-02	.6230	4.181	554.9
23	.00000	.40000	619.00	.7240-01	.9160-01	.1075	.9220	.5480-02	.3692-02	.6490	4.320	559.1
23	.00000	.40500	620.00	.8450-01	.1068	.1253	.9220	.6386-02	.4308-02	.7590	5.068	558.6
23	.00000	.41000	621.00	.1054	.1354	.1610	.9220	.8205-02	.5374-02	.8930	5.933	568.6
23	.00000	.41500	622.00	.1421	.1847	.2220	.9220	.1132-01	.7243-02	1.153	7.616	575.5
23	.00000	.43000	625.00	.2139	.2856	.3515	.9220	.1791-01	.1090-01	1.597	10.51	588.3
23	.00000	.44000	626.00	.2249	.3037	.3778	.9220	.1926-01	.1146-01	1.622	10.65	593.2
23	.00000	.44500	627.00	.2080	.2806	.3488	.9220	.1778-01	.1060-01	1.505	9.975	592.8
23	.00000	.45000	628.00	.2000	.2649	.3239	.9220	.1651-01	.1019-01	1.527	10.16	585.0
23	.00000	.45500	629.00	.1757	.2306	.2794	.9220	.1424-01	.8957-02	1.383	9.367	580.3
21	.00000	.46000	630.00	.1565	.2060	.2504	.9220	.1277-01	.7982-02	1.230	8.104	587.0
21	.00000	.47000	631.00	.1340	.1730	.2067	.9220	.1055-01	.6835-02	1.123	7.434	576.8
21	.00000	.48000	632.00	.1111	.1422	.1685	.9220	.8597-02	.5668-02	.9610	6.421	571.5
21	.00000	.49000	633.00	.9740-01	.1235	.1452	.9220	.7407-02	.4971-02	.8740	5.907	565.4
21	.00000	.50000	634.00	.7630-01	.9580-01	.1119	.9220	.5708-02	.3891-02	.7070	4.914	559.5
21	.00000	.55000	635.00	.7030-01	.8760-01	.1016	.9220	.5183-02	.3585-02	.6720	4.451	553.6
21	.00000	.60000	636.00	.5660-01	.6990-01	.8050-01	.9220	.4106-02	.2888-02	.5630	3.633	546.1
21	.00000	.65000	637.00	.4250-01	.5220-01	.5990-01	.9220	.3056-02	.2166-02	.4300	2.786	542.6
21	.00000	.70000	638.00	.3790-01	.4680-01	.5380-01	.9220	.2745-02	.1935-02	.3790	2.596	545.3
21	.00000	.75000	639.00	.1750-01	.2140-01	.2450-01	.9220	.1251-02	.8912-03	.1790	1.159	540.2
21	.00000	.80000	640.00	.4160-01	.5130-01	.5890-01	.9220	.3005-02	.2125-02	.4190	2.632	543.7
21	.00000	.85000	641.00	.1083	.1363	.1593	.9220	.8126-02	.5527-02	.9990	6.272	560.4
21	.00000	.87000	643.00	.1103	.1408	.1665	.9220	.8494-02	.5629-02	.9650	6.149	569.7
21	.00000	.88000	644.00	.1132	.1460	.1743	.9220	.8891-02	.5775-02	.9530	6.107	576.1
23	.00000	.95000	649.00	.6260-01	.7860-01	.9170-01	.9220	.4677-02	.3191-02	.5760	4.184	554.3
41	5.6250	.42500	2170.0	.1367	.1813	.2217	.9220	.1130-01	.6967-02	1.054	6.701	592.4
41	5.6250	.43000	2175.0	.2096	.2873	.3625	.9220	.1847-01	.1068-01	1.468	9.269	606.2
41	5.6250	.44000	2180.0	.2096	.2900	.3693	.9220	.1882-01	.1068-01	1.432	9.029	609.6
23	11.250	.35000	650.00	.6140-01	.7610-01	.8790-01	.9221	.4480-02	.3129-02	.5940	3.994	545.0
23	11.250	.36000	651.00	.5890-01	.7280-01	.8390-01	.9221	.4276-02	.3004-02	.5780	3.907	542.3
23	11.250	.37000	652.00	.6020-01	.7440-01	.8580-01	.9221	.4371-02	.3067-02	.5880	3.960	543.0
23	11.250	.37500	653.00	.2240-01	.2750-01	.3160-01	.9221	.1611-02	.1142-02	.2240	1.519	538.2
23	11.250	.38000	654.00	.6400-01	.7930-01	.9150-01	.9221	.4666-02	.3260-02	.6190	4.178	544.8
23	11.250	.39000	656.00	.6830-01	.8490-01	.9810-01	.9221	.5002-02	.3482-02	.6560	4.421	546.4
23	11.250	.39500	657.00	.7040-01	.8790-01	.1021	.9221	.5202-02	.3591-02	.6640	4.467	549.9
23	11.250	.40500	659.00	.8800-01	.1123	.1328	.9221	.6768-02	.4486-02	.7610	5.102	565.0
23	11.250	.41000	660.00	.1038	.1334	.1585	.9221	.8081-02	.5292-02	.8770	5.850	568.9
23	11.250	.41500	661.00	.1235	.1603	.1922	.9221	.9796-02	.6297-02	1.009	6.689	574.5

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT19)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
23	11.250	.42000	662.00	.1551	.2069	.2541	.9221	.1295-01	.7908-02	1.162	7.677	587.8
23	11.250	.42500	663.00	.1799	.2438	.3041	.9221	.1550-01	.9168-02	1.284	8.481	594.6
23	11.250	.43000	664.00	.2097	.2923	.3745	.9221	.1909-01	.1069-01	1.391	9.224	604.6
23	11.250	.44000	665.00	.2149	.3019	.3900	.9221	.1988-01	.1095-01	1.397	9.192	607.2
23	11.250	.45000	666.00	.2259	.3154	.4048	.9221	.2063-01	.1152-01	1.492	9.829	605.2
23	11.250	.45500	667.00	.2106	.2942	.3779	.9221	.1926-01	.1073-01	1.387	9.138	605.5
23	11.250	.46000	668.00	.2158	.2986	.3799	.9221	.1937-01	.1100-01	1.457	9.643	602.3
23	11.250	.47000	669.00	.1762	.2399	.3006	.9221	.1532-01	.8981-02	1.242	8.267	596.5
23	11.250	.48000	670.00	.1600	.2156	.2675	.9221	.1364-01	.8156-02	1.161	7.747	592.3
23	11.250	.49000	671.00	.1486	.1976	.2420	.9221	.1234-01	.7577-02	1.124	7.496	586.4
23	11.250	.50000	672.00	.1368	.1812	.2213	.9221	.1128-01	.6973-02	1.045	7.130	584.8
23	11.250	.70000	674.00	.4630-01	.5810-01	.6770-01	.9221	.3452-02	.2362-02	.4280	2.902	553.5
23	11.250	.85000	676.00	.1321	.1692	.2007	.9221	.1023-01	.6734-02	1.128	7.095	567.3
23	11.250	.86000	677.00	.1333	.1729	.2073	.9221	.1056-01	.6795-02	1.090	6.873	574.3
23	11.250	.87000	678.00	.1233	.1613	.1947	.9221	.9925-02	.6285-02	.9810	6.225	578.7
23	11.250	.88000	679.00	.1465	.1947	.2385	.9221	.1216-01	.7467-02	1.108	7.084	586.4
23	11.250	.90000	681.00	.1308	.1797	.2271	.9221	.1158-01	.6666-02	.8990	5.904	599.8
23	11.250	.91000	682.00	.8690-01	.1204	.1534	.9221	.7820-02	.4431-02	.5850	4.152	602.7
23	11.250	.92600	683.00	.3171	.6415	1.494	.9221	.7617-01	.1616-01	1.174	8.121	662.1
23	11.250	.95000	684.00	.5790-01	.7300-01	.8550-01	.9221	.4357-02	.2949-02	.5220	3.752	557.6
23	17.000	.33000	685.00	.5940-01	.7390-01	.8560-01	.9222	.4362-02	.3027-02	.5650	3.795	548.1
23	17.000	.34000	686.00	.6500-01	.8090-01	.9370-01	.9222	.4776-02	.3312-02	.6170	4.147	548.3
23	17.000	.35000	687.00	.7240-01	.9040-01	.1049	.9222	.5347-02	.3689-02	.6800	4.561	550.5
41	17.000	.35500	2102.0	.7040-01	.8700-01	.1001	.9222	.5103-02	.3587-02	.6980	4.563	549.0
23	17.000	.36000	688.00	.6230-01	.7700-01	.8860-01	.9222	.4516-02	.3173-02	.6100	4.109	542.5
23	17.000	.37000	689.00	.5230-01	.6410-01	.7330-01	.9222	.3739-02	.2665-02	.5300	3.582	535.8
23	17.000	.37500	690.00	.4950-01	.6040-01	.6890-01	.9222	.3514-02	.2522-02	.5100	3.464	532.4
41	17.000	.42500	2171.0	.1742	.2302	.2803	.9222	.1428-01	.8878-02	1.357	8.509	590.8
41	17.000	.43000	2176.0	.1866	.2486	.3048	.9222	.1553-01	.9511-02	1.419	9.011	594.5
21	17.000	.50000	691.00	.1822	.2376	.2859	.9222	.1459-01	.9294-02	1.476	9.745	582.3
21	17.000	.60000	692.00	.8720-01	.1079	.1242	.9222	.6338-02	.4448-02	.8600	5.540	547.9
21	17.000	.70000	693.00	.7800-01	.9800-01	.1143	.9222	.5831-02	.3979-02	.7220	4.865	559.7
21	17.000	.80000	694.00	.7540-01	.9390-01	.1087	.9222	.5547-02	.3848-02	.7240	4.535	553.0
21	17.000	.92600	696.00	.3809	.8852	3.345	.9222	.1707	.1943-01	1.264	8.681	676.1
41	20.980	.36000	2099.0	.6120-01	.7490-01	.8550-01	.9223	.4355-02	.3120-02	.6350	4.194	540.1
41	23.070	.35500	2094.0	.7840-01	.9720-01	.1121	.9224	.5712-02	.3994-02	.7660	5.032	551.8
41	23.070	.36000	2095.0	.6170-01	.7580-01	.8660-01	.9224	.4414-02	.3146-02	.6320	4.168	542.8
41	23.070	.36500	2096.0	.5330-01	.6500-01	.7390-01	.9224	.3764-02	.2718-02	.5640	3.735	536.0
40	23.070	.43500	2000.0	.1443	.1872	.2239	.9224	.1142-01	.7361-02	1.195	7.530	581.9
40	23.070	.56890	2001.0	.1041	.1335	.1581	.9224	.8068-02	.5313-02	.8980	6.062	575.2
40	23.070	.70270	2002.0	.8730-01	.1109	.1304	.9224	.6652-02	.4452-02	.7770	5.478	569.7
40	23.070	.83500	2003.0	.1018	.1299	.1531	.9224	.7810-02	.5197-02	.8970	5.629	571.8
40	23.070	.90000	2004.0	.1187	.1564	.1897	.9224	.9677-02	.6058-02	.9350	6.154	589.9

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT19)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
41	23.070	.92600	2154.0	.2755	.4686	.7644	.9224	.3896-01	.1404-01	1.266	8.568	653.5
21	29.800	.70000-01	700.00	.4214	.5718	.5496	.9557	.2804-01	.2150-01	3.028	19.94	600.2
21	29.800	.10000+00	701.00	.3302	.4299	.4392	.9465	.2240-01	.1684-01	2.692	16.87	581.3
21	29.800	.15000	702.00	.2198	.2821	.3097	.9343	.1580-01	.1121-01	1.881	13.28	573.4
21	29.800	.20000	703.00	.1086	.1335	.1499	.9261	.7646-02	.5539-02	1.100	7.344	542.5
21	29.800	.30000	704.00	.6050-01	.7490-01	.8610-01	.9227	.4393-02	.3084-02	.5930	4.199	548.8
21	29.800	.35000	705.00	.7620-01	.9500-01	.1099	.9227	.5604-02	.3885-02	.7260	4.949	554.3
41	29.800	.35500	2090.0	.7590-01	.9540-01	.1110	.9227	.5657-02	.3867-02	.7030	4.592	561.9
41	29.800	.36500	2092.0	.6410-01	.8020-01	.9300-01	.9227	.4740-02	.3268-02	.6050	3.947	558.5
41	29.800	.37000	2093.0	.5840-01	.7270-01	.8390-01	.9227	.4276-02	.2974-02	.5620	3.683	554.8
23	29.800	.50000	707.00	.1055	.1376	.1650	.9227	.8411-02	.5376-02	.8460	5.706	577.3
23	29.800	.60000	708.00	.1253	.1622	.1933	.9227	.9853-02	.6389-02	1.033	6.496	573.1
23	29.800	.70000	709.00	.9200-01	.1175	.1385	.9227	.7061-02	.4689-02	.7930	5.007	565.6
23	29.800	.80000	710.00	.9190-01	.1162	.1358	.9227	.6923-02	.4682-02	.8220	5.091	559.2
41	31.430	.44000	2166.0	.1671	.2267	.2814	.9227	.1434-01	.8515-02	1.204	7.778	602.3
40	31.430	.47600	2005.0	.1197	.1550	.1846	.9227	.9419-02	.6108-02	.9990	6.525	580.7
40	31.430	.51100	2006.0	.8840-01	.1137	.1346	.9227	.6870-02	.4511-02	.7560	5.096	576.8
40	31.430	.54600	2007.0	.8390-01	.1117	.1362	.9227	.6952-02	.4283-02	.6420	4.397	594.5
40	31.430	.61600	2009.0	.1536	.2044	.2495	.9227	.1273-01	.7837-02	1.173	7.839	594.7
40	31.430	.65000	2010.0	.1383	.1799	.2153	.9227	.1098-01	.7054-02	1.134	7.740	583.6
40	31.430	.68600	2014.0	.1258	.1640	.1966	.9227	.1003-01	.6421-02	1.026	7.022	584.5
40	31.430	.72050	2015.0	.5410-01	.6880-01	.8070-01	.9227	.4117-02	.2760-02	.4820	3.531	569.8
40	31.430	.79040	2017.0	.9850-01	.1266	.1501	.9227	.7656-02	.5024-02	.8400	5.232	577.0
40	31.430	.86000	2019.0	.1790-01	.2180-01	.2480-01	.9227	.1268-02	.9125-03	.1870	1.212	539.1
40	31.430	.89520	2020.0	.1296	.1694	.2033	.9227	.1037-01	.6615-02	1.050	6.697	585.6
41	31.430	.92600	2153.0	.2330	.3663	.5323	.9227	.2713-01	.1187-01	1.213	8.445	641.5
40	33.750	.25000	2079.0	.7280-01	.9280-01	.1090	.9228	.5559-02	.3716-02	.6440	5.223	571.0
40	33.750	.30000	2080.0	.6810-01	.8490-01	.9810-01	.9228	.5004-02	.3472-02	.6520	4.268	556.7
40	33.750	.37500	2081.0	.6700-01	.8410-01	.9770-01	.9228	.4984-02	.3417-02	.6240	4.114	561.7
40	33.750	.40000	2082.0	.1482	.2027	.2534	.9228	.1293-01	.7562-02	1.046	6.746	606.0
40	33.750	.43000	2083.0	.1662	.2196	.2660	.9228	.1357-01	.8480-02	1.298	8.431	591.3
40	33.750	.45000	2084.0	.1106	.1411	.1659	.9228	.8463-02	.5644-02	.9730	6.384	571.9
40	33.750	.60000	2085.0	.1215	.1567	.1959	.9228	.9483-02	.6200-02	1.029	6.725	578.4
41	33.750	.65000	2086.0	.1569	.2053	.2466	.9228	.1257-01	.7996-02	1.262	8.291	585.9
41	33.750	.92600	2152.0	.2073	.3073	.4165	.9228	.2123-01	.1057-01	1.207	8.452	629.4
40	36.320	.25000	2066.0	.1528	.1989	.2376	.9229	.1212-01	.7795-02	1.252	8.163	583.7
40	36.320	.30000	2067.0	.6520-01	.8140-01	.9400-01	.9229	.4798-02	.3328-02	.6230	4.078	557.1
40	36.320	.35000	2069.0	.7330-01	.9180-01	.1063	.9229	.5422-02	.3738-02	.6910	4.556	559.6
40	36.320	.37500	2070.0	.8170-01	.1025	.1189	.9229	.6067-02	.4170-02	.7650	5.043	560.9
40	36.320	.40000	2071.0	.1500	.1996	.2430	.9229	.1240-01	.7654-02	1.147	7.440	594.4
40	36.320	.42000	2072.0	.1517	.2004	.2443	.9220	.1246-01	.7742-02	1.187	7.708	591.1
40	36.320	.42500	2073.0	.1446	.1910	.2311	.9229	.1179-01	.7379-02	1.131	7.345	591.1
40	36.320	.43500	2075.0	.1458	.1931	.2342	.9229	.1195-01	.7437-02	1.129	7.331	592.5

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT19)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
40	36.320	.60000	2077.0	.1102	.1408	.1657	.9229	.8454-02	.5622-02	.9620	6.364	573.1
40	36.320	.65000	2078.0	.1418	.1863	.2244	.9229	.1145-01	.7235-02	1.127	7.557	588.5
23	37.700	.50000-01	715.00	.3963	.5308	.4837	.9643	.2465-01	.2020-01	2.928	18.70	589.8
23	37.700	.70000-01	716.00	.4489	.6470	.6071	.9574	.3095-01	.2288-01	2.745	18.11	614.8
23	37.700	.10000+00	717.00	.3124	.4119	.4169	.9481	.2125-01	.1593-01	2.424	15.44	582.5
23	37.700	.15000	718.00	.2001	.2568	.2798	.9355	.1426-01	.1020-01	1.696	12.28	568.4
23	37.700	.20000	719.00	.1128	.1390	.1557	.9269	.7938-02	.5751-02	1.122	7.589	539.7
23	37.700	.30000	720.00	.5620-01	.7020-01	.8110-01	.9230	.4133-02	.2867-02	.5290	3.782	550.0
21	37.700	.35000	721.00	.7530-01	.9350-01	.1074	.9230	.5479-02	.3843-02	.7340	5.081	550.0
21	37.700	.37500	722.00	.8590-01	.1069	.1231	.9230	.6278-02	.4385-02	.8300	5.735	551.9
21	37.700	.50000	723.00	.8540-01	.1062	.1222	.9230	.6236-02	.4358-02	.8260	5.692	551.6
21	37.700	.60000	724.00	.1085	.1365	.1587	.9230	.8095-02	.5536-02	.9990	6.343	560.6
21	37.700	.70000	725.00	.1085	.1380	.1617	.9230	.8249-02	.5537-02	.9610	6.045	567.6
21	37.700	.80000	726.00	.8280-01	.1035	.1197	.9230	.6106-02	.4224-02	.7820	4.890	556.0
21	37.700	.87000	727.00	.1130	.1456	.1725	.9230	.8799-02	.5763-02	.9530	6.005	575.7
21	37.700	.92600	728.00	.1591	.2205	.2785	.9230	.1421-01	.8114-02	1.080	7.615	608.1
22	39.000	.10000-01	993.00	.4187	.6628	.5213	.9733	.2653-01	.2131-01	2.120	14.77	633.4
22	39.000	.25000-01	994.00	.3672	.5004	.4308	.9723	.2193-01	.1869-01	2.571	17.08	595.2
40	45.000	.25000	2036.0	.4400-01	.5490-01	.6320-01	.9233	.3226-02	.2247-02	.4220	3.400	556.3
40	45.000	.32500	2038.0	.7050-01	.8810-01	.1017	.9233	.5187-02	.3596-02	.6690	4.555	558.2
40	45.000	.35000	2039.0	.8400-01	.1052	.1214	.9233	.6195-02	.4288-02	.7950	5.327	558.9
40	45.000	.37500	2040.0	.9160-01	.1152	.1335	.9233	.6812-02	.4675-02	.8510	5.689	562.4
40	45.000	.40000	2041.0	.1042	.1314	.1527	.9233	.7791-02	.5315-02	.9540	6.375	564.8
40	45.000	.42000	2042.0	.8730-01	.1095	.1267	.9233	.6463-02	.4456-02	.8190	5.480	560.6
40	45.000	.42500	2043.0	.9020-01	.1135	.1315	.9233	.6710-02	.4603-02	.8370	5.596	562.6
40	45.000	.43000	2044.0	.9360-01	.1180	.1371	.9233	.6994-02	.4777-02	.8600	5.745	564.3
40	45.000	.43500	2045.0	.9500-01	.1197	.1391	.9233	.7096-02	.4846-02	.8720	5.825	564.4
40	45.000	.44000	2046.0	.8660-01	.1088	.1261	.9233	.6434-02	.4419-02	.8050	5.385	562.1
40	45.000	.45000	2047.0	.8140-01	.1019	.1177	.9233	.6006-02	.4151-02	.7670	5.171	559.5
40	45.000	.47000	2048.0	.7770-01	.9750-01	.1128	.9233	.5757-02	.3966-02	.7280	4.945	560.9
40	45.000	.55000	2049.0	.4620-01	.5780-01	.6670-01	.9233	.3403-02	.2360-02	.4390	2.998	558.2
40	45.000	.60000	2050.0	.8260-01	.1044	.1215	.9233	.6199-02	.4216-02	.7520	5.021	565.9
40	45.000	.65000	2051.0	.1061	.1354	.1589	.9233	.8109-02	.5412-02	.9290	6.105	572.7
40	45.000	.75000	2052.0	.6870-01	.8680-01	.1011	.9233	.5157-02	.3503-02	.6230	3.923	566.4
40	45.000	.80000	2053.0	.8890-01	.1122	.1306	.9233	.6661-02	.4535-02	.8110	5.046	565.6
40	45.000	.83000	2054.0	.9910-01	.1258	.1470	.9233	.7501-02	.5055-02	.8850	5.481	569.3
40	45.000	.84000	2055.0	.1061	.1371	.1623	.9233	.8282-02	.5414-02	.8920	5.499	579.6
40	45.000	.85000	2056.0	.9920-01	.1272	.1498	.9233	.7641-02	.5059-02	.8540	5.352	575.5
40	45.000	.86000	2057.0	.9470-01	.1192	.1384	.9233	.7062-02	.4829-02	.8720	5.622	563.8
40	45.000	.87000	2058.0	.9710-01	.1231	.1437	.9233	.7331-02	.4953-02	.8710	5.740	568.4
40	45.000	.88000	2059.0	.9810-01	.1246	.1455	.9233	.7426-02	.5004-02	.8750	5.765	569.4
40	45.000	.89000	2060.0	.1170	.1514	.1795	.9233	.9158-02	.5971-02	.9790	6.431	580.4
40	45.000	.90000	2061.0	.9120-01	.1184	.1408	.9233	.7182-02	.4653-02	.7540	4.965	582.2

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT19)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
40	45.000	.91000	2062.0	.5350-01	.6800-01	.7950-01	.9233	.4054-02	.2728-02	.4760	3.847	569.9
40	45.000	.92600	2063.0	.9220-01	.1246	.1533	.9233	.7820-02	.4706-02	.6740	4.634	601.0
40	45.000	.93500	2064.0	.1028	.1448	.1850	.9233	.9439-02	.5248-02	.6740	4.865	615.8
40	45.000	.94500	2065.0	.9780-01	.1261	.1491	.9233	.7605-02	.4992-02	.8290	5.419	578.3
21	180.00	.15000-01	2182.0	.4011	.6036	.5331	.9631	.2719-01	.2046-01	2.261	16.30	630.6
21	180.00	.20000-01	2183.0	.3914	.5484	.4998	.9621	.2550-01	.1997-01	2.585	19.01	611.6
21	180.00	.25000-01	2184.0	.3736	.5028	.4639	.9621	.2367-01	.1906-01	2.750	19.57	596.8
21	180.00	.30000-01	2185.0	.4830-01	.5950-01	.5640-01	.9619	.2876-02	.2465-02	.4870	3.531	543.7
21	180.00	.40000-01	737.00	.3350	.4362	.4154	.9583	.2119-01	.1709-01	2.730	17.51	581.4
21	180.00	.45000-01	738.00	.3397	.4443	.4272	.9565	.2179-01	.1733-01	2.729	17.74	583.7
21	180.00	.60000-01	739.00	.3107	.4008	.3974	.9515	.2027-01	.1585-01	2.613	17.31	576.3
21	180.00	.70000-01	740.00	.2823	.3613	.3646	.9484	.1860-01	.1440-01	2.440	16.29	571.7
21	180.00	.80000-01	741.00	.2306	.2927	.3001	.9454	.1531-01	.1176-01	2.053	14.78	566.5
21	180.00	.10000+00	742.00	.2118	.2651	.2792	.9400	.1424-01	.1080-01	1.990	13.23	557.0
21	180.00	.12500	743.00	.1565	.1945	.2107	.9342	.1075-01	.7985-02	1.514	10.99	551.5
21	180.00	.15000	744.00	.1158	.1424	.1572	.9296	.8017-02	.5907-02	1.172	8.162	542.8
21	180.00	.17500	745.00	.7930-01	.9710-01	.1087	.9260	.5546-02	.4047-02	.8210	6.199	538.2
21	180.00	.20000	746.00	.5820-01	.7050-01	.7930-01	.9235	.4044-02	.2971-02	.6340	4.582	527.6
21	180.00	.21500	747.00	.4970-01	.6100-01	.6970-01	.9226	.3555-02	.2537-02	.5080	3.532	540.9
21	180.00	.23000	748.00	.4020-01	.4930-01	.5650-01	.9221	.2881-02	.2049-02	.4100	3.038	541.1
21	180.00	.24000	749.00	.3180-01	.3910-01	.4480-01	.9220	.2288-02	.1624-02	.3230	2.444	542.0
21	180.00	.25000	750.00	.1700-01	.2080-01	.2380-01	.9220	.1212-02	.8669-03	.1760	1.429	538.3
21	180.00	.30000	751.00	.3850-01	.4730-01	.5430-01	.9220	.2770-02	.1965-02	.3910	2.572	542.2
21	180.00	.35000	752.00	.3880-01	.4740-01	.5410-01	.9220	.2759-02	.1977-02	.4030	2.562	537.1
21	180.00	.40000	753.00	.3450-01	.4200-01	.4780-01	.9220	.2438-02	.1759-02	.3650	2.366	533.4
21	180.00	.50000	754.00	.3860-01	.4720-01	.5390-01	.9220	.2751-02	.1969-02	.4000	2.632	537.7
21	180.00	.60000	755.00	.3440-01	.4200-01	.4800-01	.9220	.2450-02	.1754-02	.3570	2.298	537.7
21	180.00	.70000	756.00	.3240-01	.3960-01	.4520-01	.9220	.2304-02	.1654-02	.3390	2.249	536.2
21	180.00	.80000	757.00	.3200-01	.3900-01	.4440-01	.9220	.2264-02	.1634-02	.3390	2.142	533.3
21	180.00	.90000	758.00	.1720-01	.2110-01	.2410-01	.9220	.1230-02	.8795-03	.1780	1.158	538.3
21	235.00	.22000	759.00	.2110-01	.2560-01	.2910-01	.9220	.1482-02	.1075-02	.2260	1.697	530.7
21	235.00	.30000	762.00	.2690-01	.3280-01	.3740-01	.9220	.1910-02	.1372-02	.2810	1.701	535.9
21	235.00	.32000	763.00	.4010-01	.4910-01	.5620-01	.9220	.2865-02	.2046-02	.4140	2.460	538.8
21	235.00	.34000	764.00	.4010-01	.4900-01	.5600-01	.9220	.2854-02	.2045-02	.4170	2.487	537.2
21	235.00	.36000	765.00	.3880-01	.4730-01	.5390-01	.9220	.2752-02	.1980-02	.4080	2.469	535.0
21	235.00	.38000	766.00	.4670-01	.5710-01	.6530-01	.9220	.3331-02	.2382-02	.4830	2.951	538.2
23	247.00	.23000	768.00	.1730-01	.2110-01	.2410-01	.9220	.1228-02	.8807-03	.1780	1.338	532.0
23	247.00	.25000	769.00	.7200-02	.8700-02	.9900-02	.9220	.5043-03	.3648-03	.7600-01	.5940	527.5
23	247.00	.30000	772.00	.3920-01	.4850-01	.5600-01	.9220	.2854-02	.1999-02	.3830	2.343	543.3
23	247.00	.31000	773.00	.4400-01	.5450-01	.6280-01	.9220	.3202-02	.2245-02	.4310	2.616	542.9
23	247.00	.32000	774.00	.4950-01	.6130-01	.7080-01	.9220	.3608-02	.2524-02	.4820	2.902	543.9
23	247.00	.32500	775.00	.5370-01	.6670-01	.7720-01	.9220	.3934-02	.2739-02	.5170	3.118	546.0
23	247.00	.33000	776.00	.6080-01	.7580-01	.8790-01	.9220	.4481-02	.3102-02	.5770	3.487	548.6

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT19)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
23	247.00	.33500	777.00	.7230-01	.9050-01	.1054	.9220	.5374-02	.3686-02	.6720	4.054	552.3
23	247.00	.34000	778.00	.7800-01	.9790-01	.1141	.9220	.5818-02	.3978-02	.7210	4.343	553.5
23	247.00	.34500	779.00	.8800-01	.1109	.1299	.9220	.6624-02	.4484-02	.7950	4.796	557.3
23	247.00	.35000	780.00	.9560-01	.1214	.1431	.9220	.7292-02	.4872-02	.8410	5.074	562.1
23	247.00	.35500	781.00	.8930-01	.1127	.1321	.9220	.6732-02	.4552-02	.8050	4.882	557.8
21	247.00	.36000	782.00	.8980-01	.1128	.1317	.9220	.6721-02	.4581-02	.8320	5.038	559.5
21	247.00	.36500	783.00	.8950-01	.1122	.1308	.9220	.6675-02	.4565-02	.8350	5.046	558.2
21	247.00	.37000	784.00	.8620-01	.1075	.1249	.9220	.6370-02	.4397-02	.8200	4.995	554.5
21	247.00	.37500	785.00	.7790-01	.9690-01	.1121	.9220	.5721-02	.3976-02	.7540	4.635	551.5
21	247.00	.38000	786.00	.7090-01	.8780-01	.1013	.9220	.5170-02	.3615-02	.6950	4.290	548.9
21	247.00	.39000	787.00	.5570-01	.6840-01	.7840-01	.9220	.4002-02	.2839-02	.5650	3.509	542.2
21	247.00	.40000	788.00	.4200-01	.5140-01	.5870-01	.9220	.2995-02	.2144-02	.4370	2.741	537.5
22	247.00	.50000	789.00	.3370-01	.4160-01	.4780-01	.9220	.2432-02	.1717-02	.3340	2.152	538.2
22	247.00	.60000	790.00	.7700-01	.9680-01	.1131	.9220	.5755-02	.3922-02	.7040	4.603	553.4
22	247.00	.70000	791.00	.5570-01	.6950-01	.8070-01	.9220	.4106-02	.2835-02	.5230	3.694	548.2
22	247.00	.80000	792.00	.3530-01	.4360-01	.5020-01	.9220	.2556-02	.1797-02	.3460	2.183	540.2
22	247.00	.90000	793.00	.3000-01	.3720-01	.4300-01	.9220	.2191-02	.1525-02	.2870	1.853	544.6
41	247.00	.92600	2144.0	.5100-01	.6460-01	.7590-01	.9220	.3869-02	.2601-02	.4610	3.191	566.6
41	247.00	.93000	2149.0	.6270-01	.8010-01	.9480-01	.9220	.4830-02	.3195-02	.5470	3.902	572.4
41	250.57	.92600	2143.0	.5530-01	.7040-01	.8310-01	.9220	.4234-02	.2817-02	.4880	3.376	570.3
41	250.57	.93000	2148.0	.7350-01	.9480-01	.1132	.9220	.5771-02	.3746-02	.6190	4.306	578.3
41	250.57	.93700	2087.0	.1673	.2436	.3273	.9220	.1668-01	.8524-02	1.011	6.936	625.0
22	258.00	.29000	795.00	.3740-01	.4620-01	.5320-01	.9220	.2706-02	.1904-02	.3670	2.268	540.1
39	258.00	.32000	798.00	.1150	.1476	.1753	.9220	.8942-02	.5868-02	.9950	5.909	577.9
39	258.00	.34000	802.00	.1653	.2166	.2622	.9220	.1337-01	.8432-02	1.330	7.872	589.7
39	258.00	.34500	803.00	.1648	.2131	.2551	.9220	.1301-01	.8405-02	1.384	8.241	582.8
39	258.00	.35500	805.00	.1532	.1981	.2372	.9220	.1210-01	.7813-02	1.286	7.657	582.9
39	258.00	.36000	806.00	.1332	.1707	.2027	.9220	.1034-01	.6793-02	1.154	6.909	577.6
39	258.00	.36500	807.00	.1149	.1459	.1718	.9220	.8761-02	.5863-02	1.033	6.220	571.3
39	258.00	.37000	808.00	.9760-01	.1225	.1430	.9220	.7296-02	.4977-02	.9130	5.532	564.1
39	258.00	.37500	809.00	.8090-01	.1007	.1167	.9220	.5951-02	.4129-02	.7870	4.782	557.0
39	258.00	.38000	810.00	.6230-01	.7680-01	.8840-01	.9220	.4508-02	.3179-02	.6290	3.859	549.7
22	258.00	.40000	812.00	.2730-01	.3360-01	.3870-01	.9220	.1969-02	.1390-02	.2710	1.675	538.2
41	258.00	.93500	2151.0	.8230-01	.1057	.1257	.9220	.6406-02	.4195-02	.7050	4.907	575.6
22	270.00	.40000-01	985.00	.2381	.3077	.3173	.9448	.1615-01	.1212-01	1.964	12.62	570.8
22	270.00	.50000-01	986.00	.2584	.3342	.3512	.9417	.1788-01	.1315-01	2.124	13.57	571.3
22	270.00	.60000-01	987.00	.2257	.2887	.3077	.9389	.1566-01	.1149-01	1.930	12.59	564.8
22	270.00	.70000-01	988.00	.2021	.2576	.2785	.9363	.1418-01	.1029-01	1.750	11.67	562.8
22	270.00	.80000-01	989.00	.1662	.2103	.2298	.9340	.1170-01	.8463-02	1.480	10.43	558.0
22	270.00	.10000+00	990.00	.1385	.1725	.1914	.9299	.9741-02	.7051-02	1.311	8.556	546.8
22	270.00	.15000	991.00	.6550-01	.8050-01	.9170-01	.9235	.4669-02	.3332-02	.6530	4.815	537.0
22	270.00	.20000	992.00	.3480-01	.4240-01	.4830-01	.9220	.2459-02	.1771-02	.3620	2.468	528.6
22	270.00	.23000	813.00	.1580-01	.1940-01	.2230-01	.9220	.1133-02	.8055-03	.1590	1.165	535.0

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT19)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
22	270.00	.24000	814.00	.1060-01	.1300-01	.1490-01	.9220	.7609-03	.5413-03	.1070	.8720	534.8
22	270.00	.29000	817.00	.7140-01	.9040-01	.1063	.9220	.5411-02	.3635-02	.6330	3.911	558.7
22	270.00	.30000	818.00	.1470	.1933	.2347	.9220	.1195-01	.7483-02	1.145	6.883	579.8
22	270.00	.31000	819.00	.1660	.2197	.2683	.9220	.1366-01	.8449-02	1.266	7.539	582.9
22	270.00	.32000	820.00	.1960	.2586	.3148	.9220	.1602-01	.9979-02	1.512	8.986	581.3
22	270.00	.32500	821.00	.2037	.2719	.3346	.9220	.1703-01	.1037-01	1.515	8.954	586.7
22	270.00	.33000	822.00	.2246	.3032	.3771	.9220	.1920-01	.1143-01	1.616	9.554	591.5
22	270.00	.33500	823.00	.2434	.3284	.4083	.9220	.2078-01	.1239-01	1.754	10.40	591.3
22	270.00	.34500	825.00	.3055	.4231	.5394	.9220	.2746-01	.1555-01	2.050	12.06	601.0
22	270.00	.35000	826.00	.2877	.3892	.4850	.9220	.2469-01	.1465-01	2.058	12.16	592.3
22	270.00	.36000	828.00	.2206	.2995	.3743	.9220	.1906-01	.1123-01	1.563	9.208	593.6
22	270.00	.37000	830.00	.1410-01	.1730-01	.1970-01	.9220	.1005-02	.7189-03	.1440	.8810	532.1
22	270.00	.37500	831.00	.6020-01	.7440-01	.8570-01	.9220	.4364-02	.3067-02	.5900	3.606	540.5
22	270.00	.38000	832.00	.4150-01	.5110-01	.5860-01	.9220	.2985-02	.2111-02	.4120	2.523	537.6
22	270.00	.39000	833.00	.3180-01	.3920-01	.4500-01	.9220	.2292-02	.1617-02	.3140	1.942	538.7
22	270.00	.40000	834.00	.2730-01	.3360-01	.3870-01	.9220	.1968-02	.1390-02	.2700	1.678	538.3
22	270.00	.50000	835.00	.3610-01	.4490-01	.5200-01	.9220	.2647-02	.1839-02	.3450	2.179	545.5
22	270.00	.60000	836.00	.6650-01	.8330-01	.9690-01	.9220	.4935-02	.3385-02	.6160	4.096	550.8
22	270.00	.70000	837.00	.5590-01	.6990-01	.8140-01	.9220	.4141-02	.2843-02	.5180	3.643	550.5
22	270.00	.80000	838.00	.3850-01	.4770-01	.5500-01	.9220	.2800-02	.1960-02	.3730	2.324	542.4
22	270.00	.90000	839.00	.3300-01	.4120-01	.4780-01	.9220	.2434-02	.1680-02	.3100	1.982	548.2
41	270.00	.92600	2141.0	.1234	.1632	.1991	.9220	.1015-01	.6289-02	.9590	6.423	591.1
41	270.00	.93000	2146.0	.1394	.1864	.2297	.9220	.1171-01	.7104-02	1.048	7.225	596.1
41	270.00	.93500	2150.0	.1163	.1509	.1811	.9220	.9227-02	.5927-02	.9610	6.674	581.5
41	289.43	.92600	2140.0	.1377	.1833	.2250	.9220	.1147-01	.7017-02	1.049	7.167	594.2
41	289.43	.93000	2145.0	.1903	.2626	.3336	.9220	.1700-01	.9698-02	1.310	9.056	608.6
22	292.50	.23000	840.00	.1280-01	.1570-01	.1790-01	.9220	.9133-03	.6496-03	.1290	1.043	534.9
22	292.50	.35000	845.00	.1011	.1297	.1541	.9220	.7845-02	.5148-02	.8560	5.192	566.6
22	292.50	.37000	846.00	.9570-01	.1215	.1432	.9220	.7287-02	.4872-02	.8400	5.143	560.4
22	292.50	.40000	847.00	.4750-01	.5890-01	.6800-01	.9220	.3462-02	.2417-02	.4580	2.857	543.5
22	292.50	.45000	848.00	.3180-01	.3930-01	.4520-01	.9220	.2302-02	.1617-02	.3100	1.957	540.8
22	292.50	.50000	849.00	.6060-01	.7600-01	.8850-01	.9220	.4506-02	.3086-02	.5600	3.590	551.5
22	292.50	.60000	851.00	.9040-01	.1139	.1334	.9220	.6793-02	.4599-02	.8140	5.432	555.8
22	292.50	.65000	852.00	.6000-01	.7490-01	.8690-01	.9220	.4424-02	.3054-02	.5630	3.830	548.3
22	292.50	.70000	853.00	.4720-01	.5880-01	.6820-01	.9220	.3470-02	.2402-02	.4460	3.128	547.2
22	292.50	.75000	854.00	.2980-01	.3680-01	.4240-01	.9220	.2157-02	.1515-02	.2910	1.892	540.8
22	292.50	.80000	855.00	.3470-01	.4290-01	.4950-01	.9220	.2519-02	.1767-02	.3390	2.208	541.3
41	292.50	.82000	2129.0	.5180-01	.6390-01	.7360-01	.9220	.3752-02	.2638-02	.5160	3.157	548.2
41	292.50	.83000	2130.0	.6160-01	.7650-01	.8840-01	.9220	.4504-02	.3141-02	.6020	3.710	552.0
41	292.50	.85000	2132.0	.5490-01	.6820-01	.7880-01	.9220	.4018-02	.2796-02	.5330	3.305	552.9
41	292.50	.86000	2133.0	.6220-01	.7740-01	.8970-01	.9220	.4572-02	.3169-02	.5990	3.687	554.6
41	292.50	.87000	2134.0	.6820-01	.8520-01	.9900-01	.9220	.5046-02	.3476-02	.6480	4.005	557.3
41	292.50	.88000	2135.0	.6550-01	.8200-01	.9550-01	.9220	.4865-02	.3336-02	.6160	3.804	559.1

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
41	292.50	.89000	2136.0	.6160-01	.7720-01	.8990-01	.9220	.4581-02	.3140-02	.5790	3.584	559.3
22	292.50	.90000	856.00	.5050-01	.6320-01	.7360-01	.9220	.3748-02	.2569-02	.4670	3.021	551.1
41	292.50	.92600	2138.0	.1069	.1385	.1658	.9220	.8452-02	.5449-02	.8890	6.118	580.4
41	292.50	.93000	2139.0	.1326	.1757	.2147	.9220	.1094-01	.6758-02	1.025	7.193	592.0
41	301.50	.82000	2116.0	.5370-01	.6670-01	.7710-01	.9220	.3929-02	.2735-02	.5220	3.189	552.8
41	301.50	.83000	2117.0	.5460-01	.6770-01	.7820-01	.9220	.3987-02	.2783-02	.5350	3.250	551.6
41	301.50	.83500	2118.0	.4990-01	.6190-01	.7140-01	.9220	.3638-02	.2545-02	.4910	2.964	550.7
41	301.50	.84000	2119.0	.4910-01	.6070-01	.7000-01	.9220	.3568-02	.2500-02	.4850	2.949	549.9
41	301.50	.85000	2120.0	.5670-01	.7020-01	.8100-01	.9220	.4130-02	.2890-02	.5580	3.406	550.5
41	301.50	.86000	2021.0	.5950-01	.7410-01	.8590-01	.9220	.4376-02	.3030-02	.5720	3.498	555.0
41	301.50	.87000	2122.0	.6250-01	.7750-01	.8960-01	.9220	.4568-02	.3183-02	.6090	3.721	552.4
41	301.50	.88000	2123.0	.5640-01	.7020-01	.8140-01	.9220	.4148-02	.2876-02	.5440	3.341	554.4
41	301.50	.89000	2124.0	.5150-01	.6400-01	.7410-01	.9220	.3775-02	.2625-02	.5000	3.095	553.3
41	301.50	.90000	2125.0	.4290-01	.5330-01	.6170-01	.9220	.3145-02	.2186-02	.4160	2.597	553.5
41	301.50	.92600	2127.0	.1102	.1404	.1659	.9220	.8457-02	.5615-02	.9690	6.001	571.0
41	301.50	.93500	2128.0	.1187	.1519	.1802	.9220	.9183-02	.6050-02	1.029	6.843	573.6
41	305.40	.82000	2113.0	.5250-01	.6480-01	.7460-01	.9220	.3804-02	.2676-02	.5230	3.186	548.1
41	305.40	.83000	2114.0	.5100-01	.6290-01	.7230-01	.9220	.3685-02	.2598-02	.5110	3.113	547.0
41	305.40	.83500	2115.0	.4930-01	.6110-01	.7060-01	.9220	.3600-02	.2512-02	.4820	2.954	551.8
22	305.40	.84000	857.00	.4980-01	.6170-01	.7120-01	.9220	.3625-02	.2536-02	.4830	2.990	542.5
39	305.40	.85000	858.00	.4930-01	.6030-01	.6890-01	.9220	.3516-02	.2514-02	.5150	3.204	542.8
39	305.40	.86000	859.00	.5830-01	.7170-01	.8220-01	.9220	.4195-02	.2975-02	.5960	3.735	547.1
39	305.40	.87000	860.00	.5970-01	.7330-01	.8400-01	.9220	.4286-02	.3044-02	.6120	3.850	546.3
39	305.40	.88000	861.00	.5530-01	.6800-01	.7790-01	.9220	.3976-02	.2823-02	.5680	3.568	546.4
39	305.40	.89000	862.00	.5910-01	.7290-01	.8390-01	.9220	.4280-02	.3015-02	.5950	3.752	550.2
39	305.40	.90000	863.00	.5530-01	.6810-01	.7830-01	.9220	.3993-02	.2819-02	.5590	3.551	549.1
39	305.40	.91000	864.00	.5480-01	.6750-01	.7760-01	.9220	.3958-02	.2795-02	.5550	4.029	549.0
39	305.40	.92600	865.00	.1123	.1424	.1675	.9220	.8545-02	.5727-02	1.013	7.251	570.7
39	309.30	.80000	866.00	.5060-01	.6200-01	.7090-01	.9220	.3618-02	.2581-02	.5250	3.305	544.1
39	309.30	.81000	867.00	.4730-01	.5810-01	.6650-01	.9220	.3392-02	.2414-02	.4880	3.051	545.4
39	309.30	.82000	868.00	.4400-01	.5400-01	.6190-01	.9220	.3157-02	.2246-02	.4540	2.840	545.4
39	309.30	.83000	869.00	.4130-01	.5060-01	.5800-01	.9220	.2957-02	.2108-02	.4280	2.685	544.4
41	309.30	.83500	2112.0	.4570-01	.5630-01	.6460-01	.9220	.3292-02	.2331-02	.4630	2.835	544.9
39	315.00	.50000-01	871.00	.2846	.3641	.3741	.9452	.1908-01	.1452-01	2.486	15.66	576.3
39	315.00	.60000-01	872.00	.2344	.2965	.3092	.9422	.1577-01	.1196-01	2.136	14.03	568.9
22	315.00	.70000-01	873.00	.2020	.2560	.2713	.9395	.1381-01	.1028-01	1.784	12.06	559.3
22	315.00	.10000+00	875.00	.1343	.1669	.1825	.9324	.9292-02	.6834-02	1.279	8.397	545.7
22	315.00	.15000	876.00	.7170-01	.8830-01	.1001	.9248	.5093-02	.3649-02	.7090	5.213	538.4
22	315.00	.20000	877.00	.3440-01	.4200-01	.4790-01	.9220	.2438-02	.1752-02	.3560	2.422	529.6
22	315.00	.35000	878.00	.5670-01	.7040-01	.8150-01	.9220	.4150-02	.2884-02	.5410	3.362	545.4
22	315.00	.40000	879.00	.1740-01	.1880-01	.1970-01	.9220	.1005-02	.8864-03	.4300	3.209	247.8
22	315.00	.50000	880.00	.7600-01	.9540-01	.1112	.9220	.5661-02	.3870-02	.6990	4.786	552.2
22	315.00	.55000	881.00	.4340-01	.5370-01	.6190-01	.9220	.3150-02	.2208-02	.4220	2.818	541.7

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT19)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
22	315.00	.60000	882.00	.4140-01	.5110-01	.5890-01	.9220	.2996-02	.2109-02	.4070	2.748	539.7
22	315.00	.65000	883.00	.3630-01	.4480-01	.5150-01	.9220	.2622-02	.1849-02	.3590	2.457	538.9
22	315.00	.70000	884.00	.2870-01	.3530-01	.4060-01	.9220	.2066-02	.1460-02	.2840	2.031	538.0
22	315.00	.75000	885.00	.1880-01	.2300-01	.2640-01	.9220	.1344-02	.9551-03	.1890	1.196	535.4
22	315.00	.80000	886.00	.4560-01	.5630-01	.6480-01	.9220	.3299-02	.2320-02	.4470	2.817	540.3
22	315.00	.84000	887.00	.4240-01	.5240-01	.6040-01	.9220	.3074-02	.2159-02	.4150	2.614	540.7
39	315.00	.85000	888.00	.4910-01	.6050-01	.6960-01	.9220	.3549-02	.2506-02	.4970	3.147	549.1
39	315.00	.87000	890.00	.4880-01	.6010-01	.6910-01	.9220	.3523-02	.2489-02	.4950	3.140	548.8
39	315.00	.88000	891.00	.5540-01	.6850-01	.7900-01	.9220	.4031-02	.2824-02	.5500	3.504	552.8
39	315.00	.89000	892.00	.6120-01	.7610-01	.8810-01	.9220	.4496-02	.3123-02	.5970	3.863	556.5
39	315.00	.90000	893.00	.5780-01	.7210-01	.8370-01	.9220	.4269-02	.2948-02	.5550	3.632	559.2
39	315.00	.91000	894.00	.4150-01	.5160-01	.5970-01	.9220	.3045-02	.2116-02	.4040	2.933	556.5
39	315.00	.92600	895.00	.7900-01	.1015	.1207	.9220	.6158-02	.4029-02	.6800	4.864	578.8
39	322.30	.42000	897.00	.1168	.1462	.1702	.9220	.8684-02	.5957-02	1.106	7.056	561.9
39	322.30	.43500	898.00	.1237	.1551	.1808	.9220	.9223-02	.6309-02	1.164	7.217	563.0
39	322.30	.45000	899.00	.1102	.1379	.1604	.9220	.8184-02	.5621-02	1.047	6.798	561.3
39	322.30	.50000	900.00	.8480-01	.1055	.1221	.9220	.6227-02	.4328-02	.8270	5.483	556.4
39	322.30	.60000	901.00	.4570-01	.5580-01	.6370-01	.9220	.3249-02	.2329-02	.4800	3.195	541.5
41	324.45	.41000	2110.0	.1004	.1268	.1487	.9220	.7580-02	.5115-02	.9120	5.695	565.3
41	324.45	.92600	2164.0	.7500-01	.9650-01	.1150	.9220	.5858-02	.3822-02	.6380	4.467	576.8
41	326.85	.40000	2107.0	.9200-01	.1148	.1333	.9220	.6796-02	.4689-02	.8770	5.502	556.5
41	326.85	.40500	2108.0	.9710-01	.1216	.1417	.9220	.7222-02	.4949-02	.9120	5.712	559.4
40	326.85	.44000	2021.0	.1179	.1501	.1771	.9220	.9035-02	.6018-02	1.046	6.570	570.5
40	326.85	.54600	2024.0	.3030-01	.3760-01	.4340-01	.9220	.2214-02	.1548-02	.2990	1.999	551.2
40	326.85	.58100	2025.0	.5120-01	.6340-01	.7320-01	.9220	.3735-02	.2612-02	.5040	3.519	551.3
40	326.85	.61600	2026.0	.3410-01	.4200-01	.4820-01	.9220	.2461-02	.1742-02	.3460	2.409	545.5
40	326.85	.65200	2027.0	.2450-01	.3000-01	.3420-01	.9220	.1747-02	.1249-02	.2540	1.773	540.8
40	326.85	.68600	2028.0	.2430-01	.2980-01	.3410-01	.9220	.1739-02	.1238-02	.2490	1.753	543.0
40	326.85	.72260	2029.0	.1760-01	.2150-01	.2460-01	.9220	.1256-02	.8968-03	.1820	1.273	541.4
40	326.85	.75790	2030.0	.1570-01	.1910-01	.2180-01	.9220	.1113-02	.7994-03	.1650	1.058	538.3
40	326.85	.79310	2031.0	.3310-01	.4060-01	.4640-01	.9220	.2368-02	.1690-02	.3430	2.156	541.4
40	326.85	.82830	2032.0	.3300-01	.4040-01	.4620-01	.9220	.2355-02	.1684-02	.3430	2.175	540.6
40	326.85	.86350	2033.0	.6070-01	.7500-01	.8640-01	.9220	.4409-02	.3096-02	.6040	3.778	549.3
40	326.85	.90000	2034.0	.5900-01	.7380-01	.8580-01	.9220	.4378-02	.3010-02	.5590	3.456	558.5
41	326.85	.92600	2163.0	.7920-01	.1046	.1276	.9220	.6501-02	.4038-02	.6180	4.298	590.6
40	326.85	.93390	2035.0	.1185	.1578	.1939	.9220	.9895-02	.6045-02	.9020	5.900	595.1
41	330.20	.40000	2104.0	.9170-01	.1143	.1325	.9220	.6755-02	.4675-02	.8810	5.528	555.2
41	330.20	.40500	2105.0	.9830-01	.1227	.1426	.9220	.7266-02	.5011-02	.9370	5.873	556.8
41	330.20	.41000	2106.0	.1005	.1262	.1473	.9220	.7508-02	.5124-02	.9360	5.841	561.0
39	330.20	.42000	905.00	.1027	.1284	.1494	.9220	.7619-02	.5236-02	.9760	6.251	561.0
39	330.20	.43500	906.00	.1065	.1341	.1569	.9220	.8005-02	.5432-02	.9850	6.329	566.1
39	330.20	.45000	907.00	.1232	.1566	.1846	.9220	.9417-02	.6286-02	1.102	7.102	572.1
39	330.20	.50000	908.00	.7330-01	.9110-01	.1055	.9220	.5381-02	.3741-02	.7160	5.096	556.2

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
39	330.20	.60000	909.00	.4070-01	.4970-01	.5670-01	.9220	.2894-02	.2076-02	.4290	2.813	541.1
39	330.20	.70000	910.00	.2330-01	.2840-01	.3230-01	.9220	.1649-02	.1189-02	.2480	1.681	538.5
39	330.20	.80000	911.00	.3120-01	.3790-01	.4310-01	.9220	.2200-02	.1591-02	.3350	2.162	536.7
39	330.20	.87000	912.00	.1180-01	.1430-01	.1630-01	.9220	.8291-03	.6006-03	.1270	.8170	535.9
41	330.20	.92600	2162.0	.1045	.1397	.1722	.9220	.8775-02	.5324-02	.7850	5.429	596.2
41	334.98	.92600	2161.0	.1195	.1598	.1969	.9220	.1004-01	.6092-02	.8990	6.197	596.1
39	334.98	.93500	913.00	.1187	.1605	.1999	.9220	.1020-01	.6053-02	.8680	6.136	604.0
39	334.98	.94500	914.00	.4080-01	.5020-01	.5760-01	.9220	.2940-02	.2079-02	.4140	2.979	548.3
39	337.50	.40000-01	915.00	.2884	.3695	.3640	.9527	.1857-01	.1471-01	2.502	15.62	577.4
39	337.50	.50000-01	916.00	.2831	.3617	.3629	.9494	.1851-01	.1444-01	2.483	15.78	575.5
39	337.50	.70000-01	918.00	.2066	.2609	.2704	.9433	.1379-01	.1054-01	1.891	13.01	568.0
39	337.50	.80000-01	919.00	.1936	.2432	.2555	.9406	.1304-01	.9878-02	1.812	12.26	564.1
39	337.50	.10000+00	920.00	.1523	.1886	.2024	.9356	.1033-01	.7768-02	1.509	10.05	553.2
39	337.50	.15000	921.00	.8490-01	.1038	.1158	.9267	.5908-02	.4328-02	.8870	6.445	542.5
39	337.50	.20000	922.00	.5080-01	.6150-01	.6960-01	.9224	.3553-02	.2593-02	.5570	3.735	532.8
39	337.50	.42000	923.00	.1115	.1401	.1637	.9220	.8348-02	.5686-02	1.040	6.721	564.7
41	337.50	.42500	2167.0	.1031	.1304	.1530	.9220	.7799-02	.5254-02	.9340	5.965	565.9
39	337.50	.43500	924.00	.9410-01	.1177	.1368	.9220	.6979-02	.4803-02	.8980	5.835	560.5
39	337.50	.85000	926.00	.5250-01	.6420-01	.7330-01	.9220	.3737-02	.2679-02	.5510	3.574	541.7
39	337.50	.86000	927.00	.1800-01	.2150-01	.2410-01	.9220	.1229-02	.9196-03	.2130	1.404	515.9
39	337.50	.87000	928.00	.5330-01	.6540-01	.7500-01	.9220	.3824-02	.2719-02	.5490	3.572	545.7
39	337.50	.88000	929.00	.5850-01	.7150-01	.8170-01	.9220	.4169-02	.2983-02	.6110	4.009	542.5
39	337.50	.89000	930.00	.4960-01	.6130-01	.7060-01	.9220	.3603-02	.2529-02	.4950	3.248	551.9
39	337.50	.90000	931.00	.4430-01	.5490-01	.6340-01	.9220	.3236-02	.2260-02	.4370	2.933	554.2
39	337.50	.91000	932.00	.4080-01	.5070-01	.5860-01	.9220	.2989-02	.2082-02	.4000	2.914	555.4
22	337.50	.92600	933.00	.9890-01	.1311	.1603	.9220	.8160-02	.5034-02	.7510	5.378	583.6
22	343.12	.41500	934.00	.1009	.1276	.1499	.9220	.7630-02	.5137-02	.8990	5.796	557.9
22	343.12	.42000	935.00	.1181	.1513	.1796	.9220	.9142-02	.6011-02	1.003	6.502	565.9
22	343.12	.42500	936.00	.1833	.2456	.3034	.9220	.1544-01	.9328-02	1.347	8.657	588.4
22	343.12	.44500	939.00	.1278	.1626	.1918	.9220	.9765-02	.6507-02	1.115	7.350	561.5
22	343.12	.45000	940.00	.1127	.1420	.1661	.9220	.8455-02	.5736-02	1.020	6.743	555.1
22	343.12	.50000	941.00	.7360-01	.9200-01	.1070	.9220	.5444-02	.3746-02	.6860	4.649	549.6
22	343.12	.60000	942.00	.4390-01	.5420-01	.6240-01	.9220	.3175-02	.2233-02	.4300	2.780	540.3
22	343.12	.80000	944.00	.4230-01	.5220-01	.6000-01	.9220	.3052-02	.2154-02	.4180	2.739	538.7
41	345.56	.42500	2168.0	.1744	.2325	.2858	.9220	.1456-01	.8889-02	1.323	8.331	594.8
41	345.56	.92600	2160.0	.1005	.1323	.1608	.9220	.8192-02	.5120-02	.7920	5.477	589.0
22	348.00	.35000	945.00	.3840-01	.4730-01	.5430-01	.9220	.2764-02	.1957-02	.3830	2.442	537.0
22	348.00	.36000	946.00	.4440-01	.5490-01	.6320-01	.9220	.3217-02	.2259-02	.4340	2.766	540.8
22	348.00	.37000	947.00	.6050-01	.7520-01	.8700-01	.9220	.4427-02	.3078-02	.5780	3.685	545.2
39	348.00	.37500	948.00	.6230-01	.7670-01	.8800-01	.9220	.4489-02	.3179-02	.6350	4.049	547.6
39	348.00	.38000	949.00	.6460-01	.7950-01	.9120-01	.9220	.4652-02	.3297-02	.6600	4.240	547.4
39	348.00	.38500	950.00	.6290-01	.7730-01	.8860-01	.9220	.4522-02	.3209-02	.6440	4.156	546.7
39	348.00	.39000	951.00	.5970-01	.7340-01	.8420-01	.9220	.4297-02	.3045-02	.6090	3.951	547.4

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT19)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
39	348.00	.39500	952.00	.5780-01	.7120-01	.8180-01	.9220	.4171-02	.2947-02	.5850	3.738	548.9
39	348.00	.40000	953.00	.6100-01	.7530-01	.8670-01	.9220	.4422-02	.3111-02	.6120	3.970	550.9
39	348.00	.41000	955.00	.9470-01	.1188	.1386	.9220	.7072-02	.4830-02	.8880	5.747	563.6
39	348.00	.42000	957.00	.1405	.1810	.2158	.9220	.1101-01	.7169-02	1.199	7.735	580.3
39	348.00	.42500	958.00	.1401	.1808	.2158	.9220	.1101-01	.7147-02	1.188	7.661	581.3
39	348.00	.43000	959.00	.2037	.2796	.3533	.9220	.1802-01	.1039-01	1.430	9.067	609.9
39	348.00	.44000	960.00	.2041	.2762	.3444	.9220	.1757-01	.1041-01	1.491	9.506	604.3
39	348.00	.44500	961.00	.1557	.2015	.2413	.9220	.1231-01	.7944-02	1.306	8.417	583.1
39	348.00	.47000	965.00	.7610-01	.9370-01	.1076	.9220	.5491-02	.3881-02	.7720	5.135	548.7
39	348.00	.85000	968.00	.7120-01	.8770-01	.1007	.9220	.5139-02	.3634-02	.7230	4.687	548.5
39	348.00	.86000	969.00	.7340-01	.9120-01	.1055	.9220	.5381-02	.3745-02	.7190	4.654	555.7
40	348.00	.89000	972.00	.5700-01	.7210-01	.8470-01	.9220	.4320-02	.2911-02	.5180	3.407	566.3
40	348.00	.90000	973.00	.5420-01	.6880-01	.8110-01	.9220	.4139-02	.2763-02	.4830	3.246	569.7
40	348.00	.91000	974.00	.4400-01	.5610-01	.6630-01	.9220	.3385-02	.2244-02	.3870	2.785	572.0
40	348.00	.92600	975.00	.1062	.1451	.1826	.9220	.9319-02	.5416-02	.7510	5.284	605.7
41	352.20	.93700	2089.0	.6450-01	.8240-01	.9760-01	.9220	.4975-02	.3286-02	.5610	3.875	572.8
41	354.00	.42500	2169.0	.2840-01	.3510-01	.4040-01	.9220	.2057-02	.1449-02	.2840	1.832	547.5
41	354.00	.43000	2174.0	.1647	.2206	.2723	.9220	.1388-01	.8393-02	1.232	7.748	596.9
41	354.00	.43500	2177.0	.2296	.3191	.4083	.9220	.2081-01	.1170-01	1.551	9.684	611.1
41	354.00	.44000	2179.0	.2312	.3254	.4216	.9220	.2149-01	.1178-01	1.513	9.430	615.2
41	355.16	.92600	2158.0	.1569	.2336	.3217	.9220	.1639-01	.7994-02	.9050	6.232	630.4

EXTERNAL TANK

PARAMETRIC DATA

ALPHA = 5.000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
12	5.030	-9.100	4.020	72.40	749.0	177.0	.4640	5.252	2621.	.2201-03	.1425-06	4.047
13	5.020	-9.100	4.020	72.50	747.0	176.5	.4650	5.260	2617.	.2210-03	.1421-06	4.070
14	5.030	-9.100	4.020	72.40	744.0	175.9	.4640	5.252	2612.	.2215-03	.1416-06	4.086
49	5.000	-9.100	4.020	72.30	750.0	177.2	.4630	5.242	2622.	.2194-03	.1426-06	4.033
50	5.010	-9.100	4.020	72.30	751.0	177.4	.4640	5.244	2623.	.2193-03	.1428-06	4.028
51	5.000	-9.100	4.020	72.30	751.0	177.6	.4640	5.244	2625.	.2190-03	.1430-06	4.021

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
12	.5104-01	.1143-01
13	.5106-01	.1140-01
14	.5099-01	.1138-01
49	.5099-01	.1145-01
50	.5101-01	.1145-01
51	.5102-01	.1146-01

TEST DATA

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
13	.00000	.25000-01	2187.0	.3822	.5176	.5038	.9539	.2572-01	.1952-01	2.787	19.13	604.2
13	.00000	.30000-01	2188.0	.3374	.4488	.4381	.9537	.2237-01	.1723-01	2.592	17.97	596.6
12	.00000	.40000-01	600.00	.3300	.4196	.4191	.9502	.2139-01	.1684-01	2.954	18.74	573.6
12	.00000	.50000-01	601.00	.2980	.3783	.3846	.9470	.1963-01	.1521-01	2.682	17.07	572.7
12	.00000	.70000-01	603.00	.2169	.2716	.2843	.9411	.1451-01	.1107-01	2.058	13.93	563.1
12	.00000	.80000-01	604.00	.2043	.2544	.2695	.9385	.1376-01	.1043-01	1.986	12.84	558.6
12	.00000	.15000	606.00	.7680-01	.9300-01	.1037	.9256	.5293-02	.3919-02	.8420	6.160	534.2
12	.00000	.20000	607.00	.3980-01	.4790-01	.5410-01	.9221	.2760-02	.2030-02	.4480	2.948	528.5
12	.00000	.21000	608.00	.3330-01	.4040-01	.4580-01	.9220	.2336-02	.1701-02	.3650	2.541	534.2
12	.00000	.22000	609.00	.2710-01	.3290-01	.3730-01	.9220	.1903-02	.1384-02	.2960	2.216	535.0
12	.00000	.30000	610.00	.2230-01	.2710-01	.3080-01	.9220	.1574-02	.1136-02	.2390	1.642	538.8
12	.00000	.35000	611.00	.4400-01	.5370-01	.6130-01	.9220	.3127-02	.2247-02	.4660	3.114	541.5

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT20)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
12	.00000	.36000	612.00	.4970-01	.6070-01	.6930-01	.9220	.3536-02	.2538-02	.5260	3.541	542.0
12	.00000	.37000	613.00	.4580-01	.5590-01	.6370-01	.9220	.3251-02	.2339-02	.4870	3.285	540.7
12	.00000	.37500	614.00	.4300-01	.5240-01	.5980-01	.9220	.3050-02	.2197-02	.4590	3.095	540.1
14	.00000	.38000	615.00	.4400-01	.5360-01	.6110-01	.9220	.3116-02	.2245-02	.4660	3.151	536.6
14	.00000	.38500	616.00	.4550-01	.5550-01	.6330-01	.9220	.3228-02	.2320-02	.4790	3.232	538.0
14	.00000	.39500	618.00	.5470-01	.6750-01	.7770-01	.9220	.3962-02	.2789-02	.5470	3.684	548.2
14	.00000	.40000	619.00	.6010-01	.7440-01	.8600-01	.9220	.4384-02	.3063-02	.5900	3.942	551.8
14	.00000	.40500	620.00	.6470-01	.8020-01	.9250-01	.9220	.4717-02	.3302-02	.6390	4.286	550.8
14	.00000	.41000	621.00	.8780-01	.1101	.1282	.9220	.6538-02	.4479-02	.8260	5.512	560.0
14	.00000	.41500	622.00	.1176	.1489	.1750	.9220	.8926-02	.5997-02	1.061	7.035	567.4
14	.00000	.43000	625.00	.1906	.2476	.2974	.9220	.1517-01	.9721-02	1.572	10.38	582.6
14	.00000	.44000	626.00	.2207	.2904	.3528	.9220	.1799-01	.1125-01	1.745	11.48	589.3
14	.00000	.44500	627.00	.2109	.2760	.3337	.9220	.1702-01	.1075-01	1.696	11.27	586.6
14	.00000	.45000	628.00	.1823	.2348	.2800	.9220	.1428-01	.9295-02	1.547	10.33	577.9
14	.00000	.45500	629.00	.1488	.1901	.2250	.9220	.1148-01	.7589-02	1.301	8.845	572.9
12	.00000	.46000	630.00	.1331	.1723	.2064	.9220	.1053-01	.6792-02	1.117	7.370	584.5
12	.00000	.47000	631.00	.1130	.1443	.1708	.9220	.8718-02	.5770-02	.9970	6.600	576.3
12	.00000	.48000	632.00	.1045	.1326	.1561	.9220	.7965-02	.5331-02	.9420	6.287	572.4
12	.00000	.49000	633.00	.9690-01	.1223	.1433	.9220	.7314-02	.4944-02	.8920	6.017	568.7
12	.00000	.50000	634.00	.7940-01	.9970-01	.1164	.9220	.5941-02	.4054-02	.7460	5.172	565.0
12	.00000	.55000	635.00	.5810-01	.7230-01	.8380-01	.9220	.4276-02	.2968-02	.5670	3.742	558.1
12	.00000	.60000	636.00	.9180-01	.1143	.1325	.9220	.6762-02	.4685-02	.8910	5.712	558.8
12	.00000	.65000	637.00	.8300-01	.1033	.1197	.9220	.6108-02	.4237-02	.8080	5.197	558.3
12	.00000	.70000	638.00	.5910-01	.7370-01	.8560-01	.9220	.4367-02	.3014-02	.5690	3.865	560.4
12	.00000	.75000	639.00	.5420-01	.6770-01	.7880-01	.9220	.4020-02	.2764-02	.5170	3.307	562.1
12	.00000	.80000	640.00	.5950-01	.7400-01	.8570-01	.9220	.4376-02	.3034-02	.5780	3.603	558.4
12	.00000	.85000	641.00	.7460-01	.9380-01	.1097	.9220	.5597-02	.3808-02	.6960	4.354	566.3
12	.00000	.87000	643.00	.1346	.1750	.2102	.9220	.1073-01	.6871-02	1.116	7.056	586.6
12	.00000	.88000	644.00	.1546	.2052	.2514	.9220	.1283-01	.7889-02	1.197	7.593	597.3
14	.00000	.95000	649.00	.6220-01	.7720-01	.8920-01	.9220	.4549-02	.3170-02	.6070	4.415	552.8
51	5.6250	.42500	2170.0	.1198	.1546	.1846	.9220	.9416-02	.6112-02	1.021	6.518	584.4
51	5.6250	.43000	2175.0	.1705	.2252	.2746	.9220	.1401-01	.8700-02	1.346	8.537	596.8
51	5.6250	.44000	2180.0	.1620	.2180	.2704	.9220	.1379-01	.8266-02	1.209	7.639	605.2
14	11.250	.35000	650.00	.4970-01	.6060-01	.6900-01	.9220	.3520-02	.2532-02	.5240	3.536	537.5
14	11.250	.36000	651.00	.4510-01	.5500-01	.6260-01	.9220	.3192-02	.2302-02	.4790	3.247	536.2
14	11.250	.37000	652.00	.4610-01	.5610-01	.6400-01	.9220	.3263-02	.2349-02	.4870	3.289	537.0
14	11.250	.38000	654.00	.4560-01	.5570-01	.6360-01	.9220	.3241-02	.2326-02	.4780	3.239	538.6
14	11.250	.39000	656.00	.4760-01	.5830-01	.6680-01	.9220	.3405-02	.2425-02	.4890	3.305	542.6
14	11.250	.39500	657.00	.5250-01	.6480-01	.7450-01	.9220	.3797-02	.2679-02	.5290	3.562	547.1
14	11.250	40500	659.00	.7130-01	.8930-01	.1040	.9220	.5303-02	.3637-02	.6720	4.515	559.5
14	11.250	.41000	660.00	.7980-01	.1004	.1173	.9220	.5980-02	.4069-02	.7390	4.942	562.7
14	11.250	.41500	661.00	.9520-01	.1202	.1409	.9220	.7187-02	.4853-02	.8680	5.778	565.5
14	11.250	.42000	662.00	.1182	.1513	.1795	.9220	.9152-02	.6030-02	1.026	6.823	574.1

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT20)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
14	11.250	.42500	663.00	.1304	.1685	.2014	.9220	.1027-01	.6648-02	1.094	7.277	579.8
14	11.250	.43000	664.00	.1439	.1885	.2281	.9220	.1163-01	.7338-02	1.154	7.718	587.1
14	11.250	.44000	665.00	.1537	.2015	.2440	.9220	.1244-01	.7835-02	1.229	8.168	587.5
14	11.250	.45000	666.00	.1342	.1704	.2007	.9220	.1024-01	.6845-02	1.200	8.046	569.1
14	11.250	.45500	667.00	.1214	.1527	.1784	.9220	.9096-02	.6193-02	1.126	7.579	562.5
14	11.250	.46000	668.00	.1119	.1400	.1629	.9220	.8307-02	.5704-02	1.057	7.147	559.0
14	11.250	.47000	669.00	.9350-01	.1166	.1354	.9220	.6904-02	.4767-02	.8940	6.071	556.8
14	11.250	.48000	670.00	.1046	.1320	.1547	.9220	.7886-02	.5335-02	.9570	6.475	564.8
14	11.250	.49000	671.00	.1202	.1523	.1791	.9220	.9132-02	.6130-02	1.083	7.288	567.7
14	11.250	.50000	672.00	.1193	.1525	.1807	.9220	.9214-02	.6081-02	1.038	7.123	573.6
14	11.250	.70000	674.00	.5800-01	.7200-01	.8320-01	.9220	.4245-02	.2958-02	.5670	3.844	552.7
14	11.250	.85000	676.00	.9320-01	.1170	.1364	.9220	.6956-02	.4755-02	.8720	5.505	560.9
14	11.250	.86000	677.00	.1078	.1366	.1605	.9220	.8186-02	.5498-02	.9720	6.151	567.5
14	11.250	.87000	678.00	.1212	.1552	.1840	.9220	.9383-02	.6181-02	1.052	6.689	574.2
14	11.250	.88000	679.00	.1310	.1700	.2040	.9220	.1040-01	.6677-02	1.083	6.941	582.1
14	11.250	.90000	681.00	.1421	.1886	.2310	.9220	.1178-01	.7247-02	1.094	7.204	593.4
14	11.250	.91000	682.00	.7070-01	.9150-01	.1095	.9220	.5586-02	.3604-02	.5900	4.230	580.7
14	11.250	.92600	683.00	.1248	.1690	.2108	.9220	.1075-01	.6364-02	.9060	6.449	602.0
14	11.250	.95000	684.00	.6420-01	.8020-01	.9310-01	.9220	.4749-02	.3275-02	.6130	4.404	557.2
14	17.000	.33000	685.00	.3960-01	.4840-01	.5530-01	.9220	.2821-02	.2019-02	.4120	2.780	540.1
14	17.000	.34000	686.00	.4760-01	.5830-01	.6660-01	.9220	.3396-02	.2428-02	.4950	3.337	540.5
14	17.000	.35000	687.00	.4290-01	.5230-01	.5960-01	.9220	.3041-02	.2187-02	.4520	3.052	537.6
51	17.000	.35500	2102.0	.4060-01	.4960-01	.5650-01	.9220	.2883-02	.2073-02	.4330	2.836	542.8
14	17.000	.36000	688.00	.4050-01	.4920-01	.5600-01	.9220	.2853-02	.2063-02	.4330	2.926	534.6
14	17.000	.37000	689.00	.4010-01	.4870-01	.5530-01	.9220	.2820-02	.2044-02	.4310	2.920	533.2
14	17.000	.37500	690.00	.4200-01	.5100-01	.5800-01	.9220	.2956-02	.2140-02	.4500	3.057	533.9
51	17.000	.42500	2171.0	.1248	.1639	.1987	.9220	.1014-01	.6367-02	1.003	6.281	594.0
51	17.000	.43000	2176.0	.1337	.1766	.2154	.9220	.1099-01	.6821-02	1.054	6.687	597.0
12	17.000	.50000	691.00	.1894	.2513	.3075	.9220	.1569-01	.9668-02	1.471	9.641	596.9
12	17.000	.60000	692.00	.7440-01	.9180-01	.1056	.9220	.5391-02	.3799-02	.7510	4.835	551.2
12	17.000	.70000	693.00	.4150-01	.5160-01	.5980-01	.9220	.3053-02	.2117-02	.4030	2.719	558.5
12	17.000	.80000	694.00	.2660-01	.3280-01	.3770-01	.9220	.1922-02	.1359-02	.2710	1.698	549.8
12	17.000	.92600	696.00	.1186	.1633	.2069	.9220	.1056-01	.6053-02	.8290	5.870	612.2
51	20.980	.36000	2099.0	.3560-01	.4310-01	.4890-01	.9220	.2493-02	.1815-02	.3910	2.590	535.9
51	20.980	.36500	2100.0	.3300-01	.3990-01	.4510-01	.9220	.2301-02	.1685-02	.3690	2.447	532.5
51	23.070	.35500	2094.0	.3680-01	.4480-01	.5110-01	.9220	.2607-02	.1878-02	.3930	2.596	541.9
51	23.070	.36000	2095.0	.3350-01	.4060-01	.4610-01	.9220	.2351-02	.1711-02	.3690	2.440	536.0
51	23.070	.36500	2096.0	.3100-01	.3740-01	.4220-01	.9220	.2155-02	.1579-02	.3460	2.297	532.2
50	23.070	.43500	2000.0	.1017	.1301	.1542	.9220	.7868-02	.5190-02	.8930	5.634	578.6
50	23.070	.56890	2001.0	.6530-01	.8150-01	.9460-01	.9220	.4827-02	.3331-02	.6290	4.275	561.7
50	23.070	.70270	2002.0	.3190-01	.3940-01	.4530-01	.9220	.2311-02	.1630-02	.3240	2.301	552.1
50	23.070	.83500	2003.0	.4600-01	.5700-01	.6570-01	.9220	.3352-02	.2348-02	.4590	2.907	555.0
50	23.070	.90000	2004.0	.1042	.1340	.1596	.9220	.8140-02	.5317-02	.8980	5.929	581.8

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT20)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
51	23.070	.92600	2154.0	.1002	.1337	.1646	.9220	.8396-02	.5111-02	.7660	5.314	601.7
12	29.800	.70000-01	700.00	.2463	.3142	.3396	.9364	.1733-01	.1257-01	2.178	14.52	575.7
12	29.800	.10000+00	701.00	.1935	.2403	.2660	.9300	.1358-01	.9875-02	1.899	12.04	556.7
12	29.800	.15000	702.00	.8930-01	.1080	.1216	.9235	.6204-02	.4556-02	.9820	7.074	533.4
12	29.800	.20000	703.00	.3910-01	.4700-01	.5290-01	.9220	.2699-02	.1997-02	.4490	3.023	524.4
12	29.800	.30000	704.00	.1750-01	.2130-01	.2420-01	.9220	.1234-02	.8943-03	.1900	1.353	536.6
12	29.800	.35000	705.00	.4110-01	.5000-01	.5700-01	.9220	.2907-02	.2098-02	.4410	3.028	539.0
51	29.800	.35500	2090.0	.4130-01	.5070-01	.5810-01	.9220	.2965-02	.2107-02	.4270	2.806	548.9
51	29.800	.36500	2092.0	.3840-01	.4700-01	.5370-01	.9220	.2738-02	.1961-02	.4050	2.661	544.9
51	29.800	.37000	2093.0	.4290-01	.5240-01	.5980-01	.9220	.3049-02	.2188-02	.4540	2.993	543.9
14	29.800	.50000	707.00	.8310-01	.1033	.1196	.9220	.6096-02	.4237-02	.8060	5.501	554.0
14	29.800	.60000	708.00	.4940-01	.5980-01	.6780-01	.9220	.3458-02	.2521-02	.5400	3.473	530.0
14	29.800	.70000	709.00	.2620-01	.3180-01	.3610-01	.9220	.1840-02	.1334-02	.2820	1.808	533.2
14	29.800	.80000	710.00	.4090-01	.4950-01	.5600-01	.9220	.2858-02	.2086-02	.4480	2.818	529.4
51	31.430	.44000	2166.0	.8570-01	.1076	.1255	.9220	.6405-02	.4374-02	.8090	5.316	566.6
50	31.430	.47600	2005.0	.7030-01	.8740-01	.1011	.9220	.5157-02	.3586-02	.6890	4.550	558.4
50	31.430	.51100	2006.0	.7780-01	.9720-01	.1128	.9220	.5757-02	.3970-02	.7490	5.088	562.0
50	31.430	.54600	2007.0	.3880-01	.4800-01	.5520-01	.9220	.2817-02	.1982-02	.3910	2.736	553.2
50	31.430	.61600	2009.0	.4160-01	.5070-01	.5780-01	.9220	.2948-02	.2120-02	.4420	3.034	542.1
50	31.430	.65000	2010.0	.3270-01	.3970-01	.4510-01	.9220	.2299-02	.1670-02	.3580	2.501	536.4
50	31.430	.68600	2014.0	.3390-01	.4120-01	.4690-01	.9220	.2395-02	.1729-02	.3640	2.545	540.2
50	31.430	.72050	2015.0	.1510-01	.1850-01	.2110-01	.9220	.1078-02	.7721-03	.1590	1.182	544.4
50	31.430	.79040	2017.0	.4540-01	.5530-01	.6300-01	.9220	.3212-02	.2316-02	.4860	3.079	540.8
50	31.430	.86000	2019.0	.1210-01	.1470-01	.1670-01	.9220	.8504-03	.6153-03	.1300	.8430	538.9
50	31.430	.89520	2020.0	.6100-01	.7600-01	.8820-01	.9220	.4501-02	.3112-02	.5900	3.811	561.0
51	31.430	.92600	2153.0	.1004	.1289	.1533	.9220	.7822-02	.5122-02	.8700	6.235	581.7
50	33.750	.25000	2079.0	.2340-01	.2860-01	.3260-01	.9220	.1663-02	.1192-02	.2460	2.025	544.0
50	33.750	.30000	2080.0	.2860-01	.3500-01	.4000-01	.9220	.2038-02	.1461-02	.3020	1.991	543.9
50	33.750	.37500	2081.0	.6090-01	.7490-01	.8610-01	.9220	.4393-02	.3105-02	.6200	4.108	550.9
50	33.750	.40000	2082.0	.8080-01	.1024	.1205	.9220	.6147-02	.4122-02	.7330	4.803	572.9
50	33.750	.45000	2084.0	.7300-01	.9050-01	.1045	.9220	.5331-02	.3725-02	.7240	4.782	556.3
50	33.750	.60000	2085.0	.4320-01	.5260-01	.5990-01	.9220	.3057-02	.2202-02	.4610	3.070	541.3
51	33.750	.65000	2086.0	.3370-01	.4080-01	.4630-01	.9220	.2363-02	.1720-02	.3710	2.498	536.0
51	33.750	.92600	2152.0	.8900-01	.1141	.1354	.9220	.6908-02	.4542-02	.7770	5.575	580.4
50	36.320	.25000	2066.0	.8230-01	.1031	.1200	.9220	.6123-02	.4198-02	.7820	5.146	564.4
50	36.320	.30000	2067.0	.3620-01	.4430-01	.5070-01	.9220	.2585-02	.1845-02	.3770	2.483	546.2
50	36.320	.35000	2069.0	.4690-01	.5760-01	.6600-01	.9220	.3365-02	.2391-02	.4840	3.209	548.4
50	36.320	.37500	2070.0	.6300-01	.7780-01	.8960-01	.9220	.4569-02	.3215-02	.6350	4.203	553.1
50	36.320	.40000	2071.0	.7740-01	.9710-01	.1132	.9220	.5776-02	.3951-02	.7320	4.817	565.3
50	36.320	.42000	2072.0	.8300-01	.1043	.1218	.9220	.6212-02	.4235-02	.7790	5.124	566.6
50	36.320	.42500	2073.0	.8640-01	.1085	.1266	.9220	.6460-02	.4409-02	.8130	5.348	566.2
50	36.320	.43000	2074.0	.8050-01	.1003	.1164	.9220	.5936-02	.4107-02	.7800	5.147	560.6
50	36.320	.43500	2075.0	.8040-01	.1002	.1162	.9220	.5926-02	.4101-02	.7800	5.142	560.5

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
50	36.320	.60000	2077.0	.3610-01	.4390-01	.5000-01	.9220	.2549-02	.1839-02	.3870	2.600	540.4
50	36.320	.65000	2078.0	.2990-01	.3640-01	.4140-01	.9220	.2113-02	.1528-02	.3230	2.220	539.2
14	37.700	.50000-01	715.00	.2906	.3714	.3910	.9410	.1994-01	.1482-01	2.536	16.33	573.2
14	37.700	.70000-01	716.00	.2899	.3748	.4091	.9357	.2086-01	.1478-01	2.427	16.29	580.1
14	37.700	.10000+00	717.00	.1870	.2313	.2563	.9294	.1307-01	.9533-02	1.850	11.98	550.2
14	37.700	.15000	718.00	.1004	.1225	.1388	.9233	.7080-02	.5120-02	1.056	7.764	538.0
14	37.700	.20000	719.00	.4380-01	.5260-01	.5920-01	.9220	.3019-02	.2232-02	.4970	3.395	521.6
14	37.700	.30000	720.00	.3350-01	.4090-01	.4650-01	.9220	.2373-02	.1710-02	.3560	2.558	536.4
12	37.700	.35000	721.00	.4770-01	.5820-01	.6650-01	.9220	.3392-02	.2433-02	.5030	3.494	542.3
12	37.700	.37500	722.00	.6340-01	.7780-01	.8920-01	.9220	.4552-02	.3237-02	.6550	4.538	546.8
12	37.700	.50000	723.00	.8050-01	.9950-01	.1146	.9220	.5847-02	.4110-02	.8090	5.571	552.3
12	37.700	.60000	724.00	.3700-01	.4480-01	.5080-01	.9220	.2592-02	.1887-02	.4050	2.606	534.4
12	37.700	.70000	725.00	.2420-01	.2940-01	.3350-01	.9220	.1710-02	.1234-02	.2590	1.650	539.4
12	37.700	.80000	726.00	.3490-01	.4230-01	.4790-01	.9220	.2446-02	.1782-02	.3830	2.425	533.9
12	37.700	.87000	727.00	.5330-01	.6560-01	.7540-01	.9220	.3846-02	.2718-02	.5410	3.456	549.8
12	37.700	.92600	728.00	.1031	.1317	.1558	.9220	.7953-02	.5264-02	.9100	6.517	576.2
13	39.000	.10000-01	993.00	.4196	.5712	.5786	.9482	.2954-01	.2143-01	3.017	21.30	606.2
13	39.000	.25000-01	994.00	.2844	.3646	.3702	.9473	.1890-01	.1452-01	2.468	16.54	577.1
50	45.000	.25000	2036.0	.1160-01	.1410-01	.1600-01	.9220	.8172-03	.5914-03	.1250	1.018	538.7
50	45.000	.32500	2038.0	.4990-01	.6140-01	.7050-01	.9220	.3594-02	.2544-02	.5100	3.482	550.3
50	45.000	.35000	2039.0	.5780-01	.7120-01	.8180-01	.9220	.4173-02	.2947-02	.5870	3.950	551.3
50	45.000	.37500	2040.0	.5780-01	.7110-01	.8160-01	.9220	.4161-02	.2947-02	.5910	3.980	550.0
50	45.000	.40000	2041.0	.7410-01	.9180-01	.1061	.9220	.5412-02	.3778-02	.7330	4.917	556.7
50	45.000	.42000	2042.0	.7430-01	.9230-01	.1068	.9220	.5447-02	.3791-02	.7300	4.896	558.0
50	45.000	.42500	2043.0	.7170-01	.8900-01	.1030	.9220	.5252-02	.3658-02	.7060	4.733	557.7
50	45.000	.43000	2044.0	.6800-01	.8430-01	.9730-01	.9220	.4963-02	.3469-02	.6740	4.526	556.2
50	45.000	.43500	2045.0	.6480-01	.8030-01	.9260-01	.9220	.4725-02	.3307-02	.6450	4.329	555.6
50	45.000	.44000	2046.0	.6310-01	.7790-01	.8970-01	.9220	.4577-02	.3219-02	.6350	4.270	553.2
50	45.000	.45000	2047.0	.6530-01	.8070-01	.9300-01	.9220	.4746-02	.3331-02	.6540	4.421	554.2
50	45.000	.47000	2048.0	.6350-01	.7870-01	.9080-01	.9220	.4631-02	.3242-02	.6330	4.312	555.4
50	45.000	.55000	2049.0	.2770-01	.3380-01	.3860-01	.9220	.1969-02	.1413-02	.2930	2.015	543.3
50	45.000	.60000	2050.0	.3570-01	.4350-01	.4950-01	.9220	.2525-02	.1820-02	.3820	2.584	540.7
50	45.000	.65000	2051.0	.2600-01	.3160-01	.3590-01	.9220	.1831-02	.1326-02	.2810	1.882	538.4
50	45.000	.75000	2052.0	.2390-01	.2930-01	.3340-01	.9220	.1706-02	.1220-02	.2500	1.593	545.3
50	45.000	.80000	2053.0	.4290-01	.5250-01	.5990-01	.9220	.3055-02	.2191-02	.4530	2.854	543.6
50	45.000	.83000	2054.0	.5710-01	.7000-01	.8020-01	.9220	.4090-02	.2913-02	.5930	3.714	547.1
50	45.000	.84000	2055.0	.6160-01	.7580-01	.8690-01	.9220	.4435-02	.3145-02	.6330	3.961	549.4
50	45.000	.85000	2056.0	.6250-01	.7670-01	.8800-01	.9220	.4487-02	.3189-02	.6450	4.099	548.2
50	45.000	.86000	2057.0	.5900-01	.7230-01	.8280-01	.9220	.4223-02	.3011-02	.6140	3.997	546.6
50	45.000	.87000	2058.0	.4890-01	.6000-01	.6880-01	.9220	.3511-02	.2494-02	.5040	3.353	548.6
50	45.000	.89000	2060.0	.5230-01	.6490-01	.7490-01	.9220	.3821-02	.2669-02	.5180	3.444	556.5
50	45.000	.90000	2061.0	.3840-01	.4750-01	.5480-01	.9220	.2796-02	.1958-02	.3820	2.552	555.3
50	45.000	.91000	2062.0	.1920-01	.2350-01	.2680-01	.9220	.1368-02	.9800-03	.2020	1.657	544.2

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT20)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
50	45.000	.92600	2063.0	.9840-01	.1274	.1527	.9220	.7787-02	.5019-02	.8270	5.724	585.9
50	45.000	.93500	2064.0	.1111	.1499	.1865	.9220	.9513-02	.5666-02	.8200	5.948	605.8
50	45.000	.94500	2065.0	.6450-01	.8130-01	.9530-01	.9220	.4859-02	.3288-02	.5960	3.910	569.5
12	180.00	.15000-01	2182.0	.4362	.6870	.5502	.9716	.2808-01	.2226-01	2.284	16.34	646.4
12	180.00	.20000-01	2183.0	.4305	.6106	.5208	.9706	.2658-01	.2197-01	2.791	20.42	622.0
12	180.00	.25000-01	2184.0	.4068	.5471	.4791	.9706	.2445-01	.2076-01	3.033	21.52	602.9
12	180.00	.30000-01	2185.0	.4710-01	.5770-01	.5290-01	.9704	.2698-02	.2405-02	.4910	3.562	544.9
12	180.00	.40000-01	737.00	.3545	.4601	.4185	.9667	.2136-01	.1809-01	2.952	18.88	585.9
12	180.00	.45000-01	738.00	.3737	.4858	.4460	.9649	.2276-01	.1907-01	3.094	20.08	586.8
12	180.00	.60000-01	739.00	.3301	.4237	.4018	.9596	.2050-01	.1685-01	2.857	18.89	579.4
12	180.00	.70000-01	740.00	.3285	.4214	.4070	.9563	.2077-01	.1676-01	2.846	18.94	579.2
12	180.00	.80000-01	741.00	.2853	.3633	.3573	.9531	.1824-01	.1456-01	2.540	18.21	574.6
12	180.00	.10000+00	742.00	.2499	.3137	.3184	.9471	.1625-01	.1275-01	2.349	15.55	564.8
12	180.00	.12500	743.00	.1987	.2479	.2602	.9405	.1328-01	.1014-01	1.914	13.82	560.3
12	180.00	.15000	744.00	.1656	.2045	.2203	.9348	.1124-01	.8452-02	1.663	11.53	552.2
12	180.00	.17500	745.00	.1191	.1456	.1598	.9301	.8156-02	.6079-02	1.250	9.411	543.4
12	180.00	.20000	746.00	.8680-01	.1057	.1178	.9264	.6013-02	.4431-02	.9280	6.660	539.7
12	180.00	.21500	747.00	.7320-01	.9050-01	.1028	.9248	.5244-02	.3736-02	.7320	5.060	553.0
12	180.00	.23000	748.00	.6190-01	.7670-01	.8770-01	.9235	.4478-02	.3160-02	.6160	4.535	554.2
12	180.00	.24000	749.00	.4930-01	.6120-01	.7040-01	.9228	.3593-02	.2517-02	.4860	3.648	556.0
12	180.00	.25000	750.00	.3020-01	.3730-01	.4270-01	.9228	.2181-02	.1540-02	.3030	2.446	552.2
12	180.00	.30000	751.00	.5770-01	.7140-01	.8210-01	.9228	.4190-02	.2943-02	.5720	3.738	554.8
12	180.00	.35000	752.00	.5800-01	.7130-01	.8150-01	.9228	.4157-02	.2958-02	.5930	3.746	548.5
12	180.00	.40000	753.00	.6080-01	.7450-01	.8500-01	.9228	.4337-02	.3102-02	.6300	4.050	546.1
12	180.00	.50000	754.00	.4890-01	.6000-01	.6840-01	.9228	.3493-02	.2494-02	.5040	3.300	546.8
12	180.00	.60000	755.00	.6230-01	.7650-01	.8750-01	.9228	.4463-02	.3177-02	.6380	4.084	548.4
12	180.00	.70000	756.00	.5260-01	.6470-01	.7400-01	.9228	.3775-02	.2682-02	.5360	3.533	549.2
12	180.00	.80000	757.00	.5100-01	.6240-01	.7110-01	.9228	.3628-02	.2600-02	.5310	3.329	545.0
12	180.00	.90000	758.00	.3310-01	.4090-01	.4690-01	.9228	.2392-02	.1691-02	.3330	2.151	551.9
12	235.00	.22000	759.00	.9440-01	.1192	.1347	.9280	.6876-02	.4818-02	.8680	6.389	568.8
12	235.00	.25000	760.00	.4490-01	.5620-01	.6410-01	.9254	.3270-02	.2294-02	.4300	3.339	561.8
12	235.00	.27000	761.00	.4260-01	.5350-01	.6130-01	.9254	.3126-02	.2175-02	.3990	2.944	565.4
12	235.00	.30000	762.00	.8550-01	.1075	.1230	.9254	.6280-02	.4365-02	.8000	4.766	565.7
12	235.00	.32000	763.00	.1008	.1271	.1458	.9254	.7440-02	.5144-02	.9310	5.453	568.0
12	235.00	.34000	764.00	.1197	.1509	.1731	.9254	.8833-02	.6108-02	1.106	6.492	568.0
12	235.00	.36000	765.00	.1512	.1939	.2252	.9254	.1149-01	.7716-02	1.312	7.760	579.0
12	235.00	.38000	766.00	.1519	.1956	.2278	.9254	.1163-01	.7751-02	1.299	7.763	581.4
14	247.00	.23000	768.00	.9120-01	.1154	.1317	.9266	.6714-02	.4650-02	.8260	6.087	566.6
14	247.00	.25000	769.00	.4490-01	.5610-01	.6390-01	.9254	.3259-02	.2289-02	.4270	3.304	557.8
14	247.00	.27000	770.00	.5920-01	.7570-01	.8780-01	.9254	.4477-02	.3019-02	.5150	3.702	573.9
14	247.00	.30000	772.00	.1103	.1413	.1640	.9254	.8365-02	.5623-02	.9530	5.740	574.9
14	247.00	.31000	773.00	.1299	.1663	.1928	.9254	.9832-02	.6623-02	1.126	6.734	574.2
14	247.00	.32000	774.00	.1586	.2055	.2404	.9254	.1226-01	.8089-02	1.320	7.803	581.1

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT20)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
14	247.00	.32500	775.00	.1917	.2506	.2952	.9254	.1505-01	.9777-02	1.549	9.159	585.9
14	247.00	.33000	776.00	.1961	.2592	.3080	.9254	.1571-01	.9998-02	1.527	9.029	591.6
14	247.00	.33500	777.00	.2211	.2962	.3556	.9254	.1813-01	.1128-01	1.656	9.761	597.5
14	247.00	.34000	778.00	.2187	.2931	.3521	.9254	.1795-01	.1115-01	1.634	9.631	597.8
14	247.00	.34500	779.00	.2293	.3093	.3735	.9254	.1904-01	.1169-01	1.681	9.923	600.5
14	247.00	.35000	780.00	.1956	.2594	.3089	.9254	.1575-01	.9975-02	1.510	8.969	592.9
14	247.00	.35500	781.00	.2157	.2897	.3485	.9254	.1777-01	.1100-01	1.602	9.515	598.7
12	247.00	.36000	782.00	.1892	.2473	.2912	.9254	.1486-01	.9657-02	1.541	9.195	589.5
12	247.00	.36500	783.00	.1821	.2353	.2749	.9254	.1403-01	.9291-02	1.537	9.173	583.6
12	247.00	.37000	784.00	.1607	.2061	.2393	.9254	.1221-01	.8201-02	1.394	8.386	579.0
12	247.00	.37500	785.00	.1533	.1969	.2290	.9254	.1169-01	.7824-02	1.323	8.016	580.0
12	247.00	.38000	786.00	.1472	.1881	.2179	.9254	.1112-01	.7511-02	1.293	7.870	576.9
12	247.00	.39000	787.00	.1219	.1539	.1768	.9254	.9021-02	.6219-02	1.118	6.853	569.2
12	247.00	.40000	788.00	.9660-01	.1210	.1381	.9254	.7049-02	.4929-02	.9150	5.673	563.3
13	247.00	.50000	789.00	.6670-01	.8260-01	.9360-01	.9254	.4779-02	.3404-02	.6600	4.215	553.3
13	247.00	.60000	790.00	.7030-01	.8770-01	.9990-01	.9254	.5099-02	.3590-02	.6760	4.411	558.7
13	247.00	.70000	791.00	.8040-01	.1011	.1158	.9254	.5913-02	.4105-02	.7480	5.234	564.8
13	247.00	.80000	792.00	.8820-01	.1101	.1255	.9254	.6406-02	.4506-02	.8470	5.287	559.2
13	247.00	.90000	793.00	.4240-01	.5360-01	.6160-01	.9254	.3146-02	.2166-02	.3880	2.472	568.1
51	247.00	.92600	2144.0	.3020-01	.4280-01	.5390-01	.9254	.2749-02	.1543-02	.1970	1.327	623.7
51	247.00	.93000	2149.0	.4160-01	.6050-01	.7790-01	.9254	.3976-02	.2124-02	.2550	1.770	631.2
51	250.57	.92600	2143.0	.2630-01	.3770-01	.4790-01	.9254	.2445-02	.1340-02	.1660	1.117	627.4
51	250.57	.93000	2148.0	.4780-01	.7080-01	.9290-01	.9254	.4741-02	.2437-02	.2810	1.900	636.1
51	250.57	.93700	2087.0	.1838	.2696	.3501	.9254	.1786-01	.9378-02	1.107	7.564	633.4
13	258.00	.27000	794.00	.5430-01	.6820-01	.7820-01	.9252	.3991-02	.2771-02	.5070	3.584	564.1
13	258.00	.29000	795.00	.1007	.1278	.1476	.9252	.7536-02	.5139-02	.9030	5.500	571.2
49	258.00	.32000	798.00	.2565	.3530	.4341	.9252	.2213-01	.1308-01	1.794	10.47	612.6
49	258.00	.34000	802.00	.2957	.4163	.5221	.9252	.2662-01	.1508-01	1.952	11.38	620.4
49	258.00	.34500	803.00	.2839	.3935	.4867	.9252	.2482-01	.1448-01	1.950	11.43	615.1
49	258.00	.35500	805.00	.2547	.3435	.4155	.9252	.2119-01	.1299-01	1.882	11.09	604.9
49	258.00	.36000	806.00	.2389	.3203	.3855	.9252	.1966-01	.1218-01	1.796	10.62	602.3
49	258.00	.36500	807.00	.2135	.2857	.3435	.9252	.1751-01	.1089-01	1.614	9.574	601.5
49	258.00	.37000	808.00	.1759	.2310	.2736	.9252	.1395-01	.8969-02	1.409	8.415	592.7
49	258.00	.37500	809.00	.1498	.1929	.2251	.9252	.1148-01	.7641-02	1.282	7.699	582.0
49	258.00	.38000	810.00	.1176	.1485	.1709	.9252	.8713-02	.5996-02	1.079	6.553	569.9
13	258.00	.40000	812.00	.8910-01	.1102	.1250	.9252	.6381-02	.4549-02	.8860	5.444	552.3
51	258.00	.93500	2151.0	.1517	.2203	.2842	.9252	.1450-01	.7740-02	.9340	6.327	630.8
13	270.00	.40000-01	985.00	.3251	.4251	.3695	.9745	.1887-01	.1660-01	2.634	16.78	588.3
13	270.00	.50000-01	986.00	.3740	.4934	.4356	.9708	.2224-01	.1910-01	2.948	18.63	592.7
13	270.00	.60000-01	987.00	.3869	.5060	.4575	.9672	.2336-01	.1975-01	3.133	20.20	588.4
13	270.00	.70000-01	988.00	.3497	.4584	.4224	.9637	.2157-01	.1785-01	2.812	18.50	589.5
13	270.00	.80000-01	989.00	.3260	.4245	.3996	.9603	.2040-01	.1665-01	2.679	18.61	586.1
13	270.00	.10000+00	990.00	.2888	.3678	.3601	.9539	.1839-01	.1475-01	2.564	16.51	573.2

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT20)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
13	270.00	.15000	991.00	.1873	.2349	.2473	.9401	.1262-01	.9564-02	1.765	12.86	562.5
13	270.00	.20000	992.00	.1153	.1419	.1563	.9299	.7983-02	.5887-02	1.174	7.932	547.7
13	270.00	.23000	813.00	.8500-01	.1067	.1217	.9257	.6214-02	.4340-02	.7990	5.759	563.0
13	270.00	.24000	814.00	.6900-01	.8680-01	.9980-01	.9247	.5094-02	.3524-02	.6440	5.163	564.3
13	270.00	.25000	815.00	.4530-01	.5630-01	.6420-01	.9247	.3276-02	.2313-02	.4430	3.480	555.5
13	270.00	.27000	816.00	.4370-01	.5460-01	.6260-01	.9247	.3194-02	.2233-02	.4180	2.948	560.1
13	270.00	.29000	817.00	.2185	.2860	.3392	.9247	.1732-01	.1116-01	1.765	10.74	588.8
13	270.00	.30000	818.00	.2878	.3848	.4642	.9247	.2370-01	.1469-01	2.176	12.96	598.9
13	270.00	.31000	819.00	.2862	.3836	.4636	.9247	.2367-01	.1461-01	2.150	12.70	599.9
13	270.00	.32000	820.00	.2756	.3677	.4428	.9247	.2261-01	.1407-01	2.097	12.36	598.0
13	270.00	.32500	821.00	.3107	.4163	.5030	.9247	.2568-01	.1586-01	2.336	13.72	599.8
13	270.00	.33000	822.00	.3409	.4713	.5848	.9247	.2986-01	.1740-01	2.349	13.75	612.1
13	270.00	.33500	823.00	.3746	.5286	.6677	.9247	.3409-01	.1913-01	2.452	14.34	618.8
13	270.00	.34500	825.00	.3232	.4251	.5061	.9247	.2584-01	.1650-01	2.569	15.19	591.3
13	270.00	.35000	826.00	.3547	.4634	.5487	.9247	.2801-01	.1811-01	2.883	17.08	587.8
13	270.00	.36000	828.00	.3428	.4856	.6156	.9247	.3143-01	.1750-01	2.223	12.92	620.0
13	270.00	.37000	830.00	.2600-01	.3170-01	.3560-01	.9247	.1819-02	.1328-02	.2770	1.683	538.7
13	270.00	.37500	831.00	.1314	.1659	.1913	.9247	.9769-02	.6712-02	1.207	7.283	567.2
13	270.00	.38000	832.00	.8770-01	.1083	.1229	.9247	.6277-02	.4480-02	.8810	5.358	550.5
13	270.00	.39000	833.00	.6150-01	.7510-01	.8450-01	.9247	.4316-02	.3142-02	.6500	4.018	540.2
13	270.00	.40000	834.00	.7710-01	.9460-01	.1069	.9247	.5459-02	.3935-02	.7930	4.906	545.4
13	270.00	.50000	835.00	.4590-01	.5670-01	.6440-01	.9247	.3287-02	.2344-02	.4600	2.900	550.9
13	270.00	.60000	836.00	.7340-01	.9130-01	.1041	.9247	.5316-02	.3750-02	.7170	4.753	555.9
13	270.00	.70000	837.00	.8660-01	.1085	.1244	.9247	.6354-02	.4423-02	.8190	5.725	561.8
13	270.00	.80000	838.00	.8810-01	.1093	.1246	.9247	.6360-02	.4497-02	.8640	5.348	554.9
13	270.00	.90000	839.00	.7620-01	.9720-01	.1130	.9247	.5771-02	.3893-02	.6730	4.246	574.1
51	270.00	.92600	2141.0	.2349	.3433	.4482	.9247	.2287-01	.1198-01	1.425	9.352	632.6
51	270.00	.93000	2146.0	.3096	.4779	.6596	.9247	.3365-01	.1580-01	1.685	11.34	644.8
51	270.00	.93500	2150.0	.2244	.3139	.3935	.9247	.2008-01	.1145-01	1.508	10.27	619.8
51	289.43	.92600	2140.0	.7540-01	.1041	.1304	.9236	.6651-02	.3845-02	.5240	3.541	615.3
51	289.43	.93000	2145.0	.7770-01	.1099	.1407	.9236	.7177-02	.3965-02	.5090	3.495	623.1
13	292.50	.23000	840.00	.6330-01	.7870-01	.9010-01	.9242	.4603-02	.3230-02	.6140	4.920	557.1
13	292.50	.25000	841.00	.3540-01	.4370-01	.4990-01	.9234	.2550-02	.1810-02	.3570	2.764	549.7
13	292.50	.27000	842.00	.2050-01	.2520-01	.2870-01	.9234	.1463-02	.1046-02	.2100	1.469	546.3
13	292.50	.35000	845.00	.1364	.1731	.2020	.9234	.1032-01	.6962-02	1.226	7.424	570.9
13	292.50	.37000	846.00	.9980-01	.1238	.1420	.9234	.7249-02	.5094-02	.9810	6.021	554.5
13	292.50	.40000	847.00	.4010-01	.4860-01	.5470-01	.9234	.2795-02	.2046-02	.4370	2.740	533.5
13	292.50	.45000	848.00	.1800-01	.2170-01	.2440-01	.9234	.1247-02	.9172-03	.1990	1.258	530.5
13	292.50	.50000	849.00	.9600-02	.1170-01	.1320-01	.9234	.6760-03	.4921-03	.1040	.6690	536.6
13	292.50	.60000	851.00	.6030-01	.7460-01	.8530-01	.9234	.4358-02	.3079-02	.6010	4.015	551.9
13	292.50	.65000	852.00	.7190-01	.8920-01	.1024	.9234	.5227-02	.3672-02	.7060	4.788	554.6
13	292.50	.70000	853.00	.8150-01	.1021	.1181	.9234	.6028-02	.4159-02	.7680	5.347	562.4
13	292.50	.75000	854.00	.7760-01	.9690-01	.1116	.9234	.5699-02	.3964-02	.7450	4.804	559.0

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT20)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
13	292.50	.80000	855.00	.8180-01	.1017	.1169	.9234	.5969-02	.4175-02	.7950	5.147	556.6
51	292.50	.82000	2129.0	.7560-01	.9460-01	.1093	.9234	.5574-02	.3857-02	.7210	4.376	564.7
51	292.50	.83000	2130.0	.7180-01	.9020-01	.1045	.9234	.5329-02	.3663-02	.6740	4.124	567.4
51	292.50	.85000	2132.0	.7150-01	.9050-01	.1053	.9234	.5374-02	.3649-02	.6540	4.014	572.2
51	292.50	.86000	2133.0	.7350-01	.9330-01	.1090	.9234	.5559-02	.3749-02	.6630	4.037	574.8
51	292.50	.87000	2134.0	.7080-01	.9030-01	.1059	.9234	.5403-02	.3612-02	.6270	3.836	577.9
51	292.50	.88000	2135.0	.8470-01	.1089	.1284	.9234	.6552-02	.4319-02	.7300	4.454	582.6
51	292.50	.89000	2136.0	.1037	.1344	.1596	.9234	.8141-02	.5292-02	.8700	5.316	587.0
13	292.50	.90000	856.00	.7910-01	.1013	.1191	.9234	.6079-02	.4038-02	.6890	4.401	576.5
51	292.50	.92600	2138.0	.7540-01	.1014	.1242	.9234	.6336-02	.3845-02	.5630	3.826	605.1
51	292.50	.93000	2139.0	.7780-01	.1059	.1309	.9234	.6679-02	.3971-02	.5640	3.921	609.5
51	301.50	.82000	2116.0	.9130-01	.1158	.1355	.9229	.6914-02	.4660-02	.8280	5.009	573.7
51	301.50	.83000	2117.0	.9440-01	.1198	.1402	.9229	.7155-02	.4816-02	.8540	5.135	574.2
51	301.50	.83500	2118.0	.1036	.1321	.1552	.9229	.7919-02	.5288-02	.9230	5.493	577.0
51	301.50	.84000	2119.0	.1073	.1367	.1606	.9229	.8192-02	.5473-02	.9550	5.737	576.9
51	301.50	.85000	2120.0	.1035	.1318	.1547	.9229	.7894-02	.5280-02	.9240	5.566	576.5
51	301.50	.86000	2021.0	.1011	.1289	.1516	.9229	.7735-02	.5156-02	.8960	5.423	577.7
51	301.50	.87000	2122.0	.8050-01	.1025	.1204	.9229	.6142-02	.4108-02	.7190	4.340	576.5
51	301.50	.88000	2123.0	.9170-01	.1181	.1400	.9229	.7142-02	.4680-02	.7870	4.762	583.4
51	301.50	.89000	2124.0	.1009	.1305	.1551	.9229	.7916-02	.5147-02	.8530	5.199	585.8
51	301.50	.90000	2125.0	.9870-01	.1281	.1527	.9229	.7793-02	.5038-02	.8260	5.071	587.6
51	301.50	.92600	2127.0	.8550-01	.1138	.1386	.9229	.7074-02	.4361-02	.6590	4.021	600.4
51	301.50	.93500	2128.0	.1025	.1354	.1639	.9229	.8361-02	.5229-02	.8090	5.320	596.8
51	305.40	.82000	2113.0	.9830-01	.1243	.1453	.9227	.7411-02	.5016-02	.9020	5.428	571.7
51	305.40	.83000	2114.0	.1150	.1462	.1716	.9227	.8756-02	.5869-02	1.034	6.215	575.3
51	305.40	.83500	2115.0	.1434	.1869	.2239	.9227	.1142-01	.7318-02	1.183	7.115	589.8
13	305.40	.84000	857.00	.1482	.1905	.2256	.9227	.1152-01	.7568-02	1.274	7.751	578.6
49	305.40	.85000	858.00	.1307	.1658	.1942	.9227	.9904-02	.6665-02	1.182	7.249	572.5
49	305.40	.86000	859.00	.1067	.1347	.1573	.9227	.8022-02	.5440-02	.9800	6.069	569.7
49	305.40	.87000	860.00	.1099	.1390	.1624	.9227	.8284-02	.5605-02	1.005	6.240	570.5
49	305.40	.88000	861.00	.1081	.1368	.1599	.9227	.8156-02	.5512-02	.9860	6.120	571.0
49	305.40	.89000	862.00	.1148	.1466	.1726	.9227	.8801-02	.5857-02	1.015	6.320	576.5
49	305.40	.90000	863.00	.1045	.1333	.1569	.9227	.8001-02	.5328-02	.9250	5.791	576.3
49	305.40	.91000	864.00	.5860-01	.7410-01	.8660-01	.9227	.4418-02	.2986-02	.5340	3.835	571.0
49	305.40	.92600	865.00	.9570-01	.1250	.1501	.9227	.7653-02	.4880-02	.7810	5.539	589.8
49	309.30	.80000	866.00	.9860-01	.1243	.1452	.9225	.7406-02	.5026-02	.9090	5.649	569.0
49	309.30	.81000	867.00	.9700-01	.1226	.1434	.9225	.7313-02	.4946-02	.8880	5.485	570.3
49	309.30	.82000	868.00	.9920-01	.1254	.1467	.9225	.7479-02	.5058-02	.9080	5.607	570.3
49	309.30	.83000	869.00	.1239	.1578	.1857	.9225	.9472-02	.6317-02	1.102	6.808	575.3
49	315.00	.50000-01	871.00	.3384	.4425	.4183	.9594	.2133-01	.1726-01	2.748	17.19	590.5
49	315.00	.60000-01	872.00	.3025	.3939	.3800	.9560	.1938-01	.1543-01	2.494	16.23	588.1
13	315.00	.70000-01	873.00	.2929	.3746	.3690	.9527	.1884-01	.1496-01	2.561	17.17	575.8
13	315.00	.10000+00	875.00	.2265	.2832	.2921	.9439	.1491-01	.1157-01	2.159	14.07	560.4

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT20)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
13	315.00	.15000	876.00	.1372	.1693	.1845	.9324	.9420-02	.7008-02	1.382	10.10	549.8
13	315.00	.20000	877.00	.7770-01	.9450-01	.1060	.9250	.5413-02	.3965-02	.8300	5.623	537.7
13	315.00	.35000	878.00	.7680-01	.9430-01	.1080	.9223	.5515-02	.3919-02	.7860	4.888	546.4
13	315.00	.40000	879.00	.1370-01	.1470-01	.1540-01	.9223	.7847-03	.7008-03	.3810	2.917	204.0
13	315.00	.50000	880.00	.3810-01	.4680-01	.5370-01	.9223	.2740-02	.1943-02	.3880	2.660	547.6
13	315.00	.55000	881.00	.4740-01	.5870-01	.6760-01	.9223	.3453-02	.2419-02	.4690	3.112	553.2
13	315.00	.60000	882.00	.6450-01	.8020-01	.9270-01	.9223	.4732-02	.3295-02	.6300	4.216	555.8
13	315.00	.65000	883.00	.1004	.1266	.1480	.9223	.7558-02	.5128-02	.9260	6.258	566.5
13	315.00	.70000	884.00	.1247	.1598	.1893	.9223	.9664-02	.6367-02	1.083	7.586	576.9
13	315.00	.75000	885.00	.9120-01	.1157	.1359	.9223	.6937-02	.4658-02	.8230	5.128	570.3
13	315.00	.80000	886.00	.9310-01	.1174	.1372	.9223	.7008-02	.4756-02	.8590	5.348	566.4
13	315.00	.84000	887.00	.1456	.1896	.2279	.9223	.1163-01	.7432-02	1.195	7.360	586.3
49	315.00	.85000	888.00	.1617	.2101	.2519	.9223	.1284-01	.8246-02	1.342	8.338	587.0
49	315.00	.87000	890.00	.1330	.1703	.2016	.9223	.1028-01	.6784-02	1.162	7.270	578.5
49	315.00	.88000	891.00	.1274	.1636	.1942	.9223	.9903-02	.6498-02	1.101	6.922	580.3
49	315.00	.89000	892.00	.1327	.1713	.2042	.9223	.1041-01	.6768-02	1.126	7.195	583.4
49	315.00	.90000	893.00	.1213	.1576	.1890	.9223	.9636-02	.6183-02	1.006	6.487	587.2
49	315.00	.91000	894.00	.7150-01	.9190-01	.1091	.9223	.5564-02	.3647-02	.6170	4.424	580.6
49	315.00	.92600	895.00	.1534	.2089	.2612	.9223	.1332-01	.7822-02	1.104	7.783	608.7
49	322.30	.42000	897.00	.4350-01	.5350-01	.6130-01	.9221	.3127-02	.2220-02	.4470	2.869	548.6
49	322.30	.43500	898.00	.4890-01	.6000-01	.6870-01	.9221	.3501-02	.2493-02	.5050	3.159	547.0
49	322.30	.45000	899.00	.4510-01	.5550-01	.6360-01	.9221	.3245-02	.2302-02	.4630	3.027	548.7
49	322.30	.50000	900.00	.5250-01	.6530-01	.7560-01	.9221	.3853-02	.2678-02	.5130	3.396	558.3
49	322.30	.60000	901.00	.8400-01	.1071	.1265	.9221	.6449-02	.4284-02	.7450	4.877	575.8
51	324.45	.40500	2109.0	.5640-01	.6960-01	.8000-01	.9221	.4081-02	.2877-02	.5710	3.589	552.9
51	324.45	.41000	2110.0	.5780-01	.7140-01	.8230-01	.9221	.4198-02	.2949-02	.5800	3.644	554.7
51	324.45	.92600	2164.0	.8630-01	.1165	.1449	.9221	.7393-02	.4402-02	.6370	4.397	606.7
51	326.85	.40000	2107.0	.5550-01	.6810-01	.7800-01	.9220	.3980-02	.2834-02	.5770	3.633	547.9
51	326.85	.40500	2108.0	.5710-01	.7030-01	.8080-01	.9220	.4121-02	.2914-02	.5830	3.668	551.3
50	326.85	.44000	2021.0	.5000-01	.6150-01	.7050-01	.9220	.3599-02	.2551-02	.5130	3.254	549.6
50	326.85	.54600	2024.0	.6590-01	.8370-01	.9860-01	.9220	.5028-02	.3361-02	.5940	3.923	574.0
50	326.85	.58100	2025.0	.1126	.1450	.1728	.9220	.8814-02	.5742-02	.9640	6.625	582.7
50	326.85	.61600	2026.0	.1069	.1375	.1637	.9220	.8352-02	.5454-02	.9200	6.283	582.0
50	326.85	.65200	2027.0	.1099	.1414	.1685	.9220	.8597-02	.5605-02	.9420	6.436	582.5
50	326.85	.68600	2028.0	.7510-01	.9620-01	.1141	.9220	.5823-02	.3831-02	.6560	4.526	579.5
50	326.85	.72260	2029.0	.6440-01	.8180-01	.9630-01	.9220	.4913-02	.3283-02	.5790	3.986	574.1
50	326.85	.75790	2030.0	.4520-01	.5690-01	.6640-01	.9220	.3389-02	.2306-02	.4230	2.674	567.4
50	326.85	.79310	2031.0	.9300-01	.1184	.1399	.9220	.7135-02	.4744-02	.8280	5.116	576.0
50	326.85	.82830	2032.0	.1095	.1401	.1661	.9220	.8473-02	.5586-02	.9600	5.968	578.8
50	326.85	.86350	2033.0	.1386	.1795	.2149	.9220	.1096-01	.7072-02	1.166	7.165	585.8
50	326.85	.90000	2034.0	.1232	.1615	.1954	.9220	.9970-02	.6283-02	.9950	6.042	592.3
51	326.85	.92600	2163.0	.9210-01	.1246	.1554	.9220	.7927-02	.4698-02	.6760	4.660	607.6
50	326.85	.93390	2035.0	.1374	.1927	.2488	.9220	.1269-01	.7009-02	.9160	5.923	619.9

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
51	330.20	.40000	2104.0	.5230-01	.6400-01	.7320-01	.9220	.3734-02	.2668-02	.5480	3.453	546.2
51	330.20	.40500	2105.0	.5610-01	.6880-01	.7880-01	.9220	.4023-02	.2863-02	.5820	3.667	548.1
51	330.20	.41000	2106.0	.5940-01	.7320-01	.8410-01	.9220	.4292-02	.3031-02	.6040	3.789	552.0
49	330.20	.42000	905.00	.5860-01	.7210-01	.8280-01	.9220	.4222-02	.2987-02	.5970	3.846	549.8
49	330.20	.43500	906.00	.5970-01	.7350-01	.8460-01	.9220	.4313-02	.3042-02	.6040	3.910	551.2
49	330.20	.45000	907.00	.6970-01	.8640-01	.9970-01	.9220	.5082-02	.3557-02	.6930	4.504	554.9
49	330.20	.50000	908.00	.6060-01	.7570-01	.8790-01	.9220	.4482-02	.3090-02	.5820	4.129	561.6
49	330.20	.60000	909.00	.1201	.1534	.1816	.9220	.9259-02	.6122-02	1.057	6.810	577.2
49	330.20	.70000	910.00	.8430-01	.1075	.1271	.9220	.6480-02	.4301-02	.7480	4.968	575.9
49	330.20	.80000	911.00	.6150-01	.7690-01	.8940-01	.9220	.4560-02	.3138-02	.5890	3.744	562.2
49	330.20	.87000	912.00	.1660-01	.2030-01	.2320-01	.9220	.1184-02	.8476-03	.1740	1.117	544.0
51	330.20	.92600	2162.0	.9870-01	.1339	.1675	.9220	.8545-02	.5033-02	.7180	4.932	608.9
51	334.98	.92600	2161.0	.1356	.1889	.2422	.9220	.1236-01	.6917-02	.9210	6.277	618.4
49	334.98	.93500	913.00	.2429	.3771	.5461	.9220	.2785-01	.1238-01	1.304	9.038	644.5
49	334.98	.94500	914.00	.8440-01	.1057	.1231	.9220	.6279-02	.4303-02	.8000	5.708	564.0
49	337.50	.40000-01	915.00	.3093	.4018	.3874	.9562	.1976-01	.1577-01	2.568	15.95	587.0
49	337.50	.50000-01	916.00	.3091	.4005	.3940	.9528	.2009-01	.1576-01	2.588	16.37	585.6
49	337.50	.70000-01	918.00	.2316	.2946	.3003	.9465	.1531-01	.1181-01	2.069	14.18	574.6
49	337.50	.80000-01	919.00	.2154	.2725	.2820	.9436	.1438-01	.1099-01	1.968	13.27	570.7
49	337.50	.10000+00	920.00	.1722	.2147	.2277	.9384	.1161-01	.8781-02	1.664	11.04	560.3
49	337.50	.15000	921.00	.1025	.1264	.1405	.9285	.7166-02	.5224-02	1.034	7.471	551.9
49	337.50	.20000	922.00	.5550-01	.6780-01	.7690-01	.9231	.3922-02	.2831-02	.5870	3.919	542.4
49	337.50	.42000	923.00	.7110-01	.8810-01	.1017	.9220	.5188-02	.3625-02	.7040	4.573	555.6
51	337.50	.42500	2167.0	.8250-01	.1029	.1195	.9220	.6094-02	.4208-02	.7970	5.100	562.1
49	337.50	.43500	924.00	.7480-01	.9300-01	.1076	.9220	.5485-02	.3815-02	.7330	4.768	557.7
49	337.50	.85000	926.00	.8610-01	.1089	.1279	.9220	.6524-02	.4389-02	.7840	5.012	571.1
49	337.50	.86000	927.00	.9580-01	.1220	.1441	.9220	.7348-02	.4885-02	.8520	5.449	575.3
49	337.50	.87000	928.00	.9940-01	.1271	.1506	.9220	.7679-02	.5070-02	.8730	5.589	577.7
49	337.50	.88000	929.00	.3510-01	.4280-01	.4870-01	.9220	.2485-02	.1792-02	.3760	2.466	540.1
49	337.50	.89000	930.00	.1446	.1910	.2329	.9220	.1188-01	.7371-02	1.136	7.299	595.6
49	337.50	.90000	931.00	.1266	.1686	.2070	.9220	.1055-01	.6456-02	.9720	6.386	599.2
49	337.50	.91000	932.00	.8540-01	.1128	.1374	.9220	.7009-02	.4356-02	.6730	4.808	595.3
13	337.50	.92600	933.00	.1323	.1872	.2440	.9220	.1246-01	.6754-02	.8590	6.045	619.8
13	343.12	.41500	934.00	.7690-01	.9480-01	.1089	.9220	.5561-02	.3928-02	.7800	5.052	548.6
13	343.12	.42000	935.00	.8100-01	.1001	.1153	.9220	.5887-02	.4135-02	.8100	5.285	551.2
13	343.12	.42500	936.00	.9700-01	.1213	.1410	.9220	.7200-02	.4952-02	.9240	6.025	560.4
13	343.12	.44500	939.00	.9490-01	.1187	.1380	.9220	.7047-02	.4847-02	.9050	5.967	560.4
13	343.12	.45000	940.00	.9770-01	.1225	.1429	.9220	.7295-02	.4988-02	.9190	6.053	562.8
13	343.12	.50000	941.00	.1690	.2249	.2762	.9220	.1410-01	.8628-02	1.295	8.569	596.9
13	343.12	.60000	942.00	.9880-01	.1243	.1454	.9220	.7423-02	.5043-02	.9170	5.856	565.3
13	343.12	.80000	944.00	.7350-01	.9220-01	.1076	.9220	.5492-02	.3755-02	.6920	4.478	562.8
51	345.56	.42500	2168.0	.9000-01	.1131	.1321	.9220	.6738-02	.4593-02	.8460	5.397	567.4
51	345.56	.92600	2160.0	.1483	.2075	.2671	.9220	.1363-01	.7568-02	.9980	6.796	619.7

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT20)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
13	348.00	.35000	945.00	.3590-01	.4340-01	.4930-01	.9220	.2515-02	.1832-02	.3930	2.507	532.6
13	348.00	.36000	946.00	.3100-01	.3750-01	.4240-01	.9220	.2166-02	.1583-02	.3430	2.199	530.4
13	348.00	.37000	947.00	.3090-01	.3730-01	.4220-01	.9220	.2154-02	.1578-02	.3440	2.213	529.0
49	348.00	.37500	948.00	.3150-01	.3840-01	.4380-01	.9220	.2232-02	.1609-02	.3370	2.154	540.4
49	348.00	.38000	949.00	.3150-01	.3840-01	.4380-01	.9220	.2236-02	.1607-02	.3340	2.154	541.8
49	348.00	.38500	950.00	.3350-01	.4100-01	.4690-01	.9220	.2392-02	.1709-02	.3500	2.258	545.1
49	348.00	.39000	951.00	.4110-01	.5050-01	.5800-01	.9220	.2958-02	.2096-02	.4210	2.727	549.0
49	348.00	.39500	952.00	.5580-01	.6880-01	.7900-01	.9220	.4029-02	.2848-02	.5680	3.623	550.4
49	348.00	.40000	953.00	.5840-01	.7190-01	.8260-01	.9220	.4210-02	.2977-02	.5940	3.860	550.1
49	348.00	.41000	955.00	.6870-01	.8490-01	.9790-01	.9220	.4992-02	.3502-02	.6860	4.461	553.8
49	348.00	.41500	956.00	.7500-01	.9320-01	.1079	.9220	.5500-02	.3825-02	.7350	4.781	557.7
49	348.00	.42000	957.00	.8150-01	.1017	.1182	.9220	.6027-02	.4154-02	.7820	5.094	561.6
49	348.00	.42500	958.00	.8010-01	.9990-01	.1160	.9220	.5915-02	.4087-02	.7740	5.041	560.5
49	348.00	.43000	959.00	.9840-01	.1251	.1475	.9220	.7523-02	.5019-02	.8820	5.691	574.1
49	348.00	.44000	960.00	.1144	.1461	.1730	.9220	.8822-02	.5832-02	1.006	6.504	577.2
49	348.00	.44500	961.00	.1220	.1571	.1873	.9220	.9551-02	.6222-02	1.044	6.732	582.0
49	348.00	.47000	965.00	.1544	.2057	.2527	.9220	.1288-01	.7875-02	1.185	7.687	599.4
49	348.00	.85000	968.00	.7830-01	.9890-01	.1159	.9220	.5912-02	.3991-02	.7180	4.604	569.8
49	348.00	.86000	969.00	.7110-01	.9060-01	.1070	.9220	.5458-02	.3625-02	.6310	4.047	575.7
50	348.00	.89000	972.00	.1636	.2210	.2751	.9220	.1404-01	.8346-02	1.205	7.771	606.2
50	348.00	.90000	973.00	.1331	.1806	.2257	.9220	.1151-01	.6787-02	.9680	6.389	608.0
50	348.00	.91000	974.00	.8870-01	.1195	.1483	.9220	.7563-02	.4525-02	.6590	4.673	604.9
50	348.00	.92600	975.00	.1194	.1720	.2284	.9220	.1165-01	.6090-02	.7470	5.200	628.0
51	352.20	.93700	2089.0	.2910-01	.4260-01	.5750-01	.9220	.2934-02	.1485-02	.1760	1.181	632.8
51	354.00	.42500	2169.0	.2020-01	.2470-01	.2820-01	.9220	.1441-02	.1029-02	.2110	1.361	546.4
51	354.00	.43000	2174.0	.1272	.1660	.2002	.9220	.1021-01	.6489-02	1.043	6.579	590.8
51	354.00	.43500	2177.0	.1601	.2140	.2637	.9220	.1345-01	.8170-02	1.219	7.649	602.2
51	354.00	.44000	2179.0	.1780	.2397	.2973	.9220	.1517-01	.9084-02	1.327	8.314	605.4
51	355.16	.92600	2158.0	.1350	.1938	.2565	.9220	.1308-01	.6887-02	.8520	5.876	627.7

EXTERNAL TANK

PARAMETRIC DATA

ALPHA = 5.000 BETA = 9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
24	5.080	9.100	4.020	72.60	737.0	174.2	.4660	5.269	2600.	.2243-03	.1402-06	4.159
25	5.080	9.100	4.020	72.50	739.0	174.5	.4650	5.259	2602.	.2235-03	.1405-06	4.139
26	5.060	9.100	4.020	72.60	741.0	175.1	.4650	5.264	2606.	.2230-03	.1410-06	4.123
46	5.060	9.100	4.020	72.20	749.0	177.0	.4630	5.241	2620.	.2196-03	.1425-06	4.039
47	5.060	9.100	4.020	72.30	749.0	177.0	.4640	5.245	2621.	.2198-03	.1425-06	4.042
48	5.060	9.100	4.020	72.30	750.0	177.2	.4640	5.246	2622.	.2196-03	.1426-06	4.037

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
24	.5101-01	.1130-01
25	.5097-01	.1132-01
26	.5102-01	.1134-01
46	.5098-01	.1144-01
47	.5100-01	.1144-01
48	.5102-01	.1144-01

TEST DATA

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
25	.00000	.25000-01	2187.0	.3464	.4607	.4495	.9538	.2292-01	.1766-01	2.630	18.18	589.7
25	.00000	.30000-01	2188.0	.3607	.4818	.4704	.9536	.2398-01	.1839-01	2.702	18.78	591.7
24	.00000	.40000-01	600.00	.3229	.4150	.4147	.9501	.2115-01	.1647-01	2.734	17.37	571.2
24	.00000	.50000-01	601.00	.2561	.3244	.3298	.9469	.1682-01	.1307-01	2.290	14.65	562.0
24	.00000	.70000-01	603.00	.2087	.2630	.2758	.9410	.1407-01	.1064-01	1.901	12.89	558.6
24	.00000	.80000-01	604.00	.1946	.2446	.2600	.9384	.1326-01	.9924-02	1.789	11.58	556.9
24	.00000	.15000	606.00	.8490-01	.1039	.1166	.9256	.5948-02	.4333-02	.8760	6.403	535.1
24	.00000	.20000	607.00	.4390-01	.5320-01	.6040-01	.9221	.3080-02	.2238-02	.4700	3.099	527.1
24	.00000	.21000	608.00	.3650-01	.4450-01	.5060-01	.9220	.2584-02	.1861-02	.3830	2.664	531.6
24	.00000	.22000	609.00	.2910-01	.3550-01	.4040-01	.9220	.2062-02	.1485-02	.3050	2.286	531.8
24	.00000	.30000	610.00	.2560-01	.3120-01	.3560-01	.9220	.1816-02	.1304-02	.2660	1.833	533.3
24	.00000	.35000	611.00	.3790-01	.4640-01	.5300-01	.9220	.2701-02	.1935-02	.3920	2.630	534.5

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT24)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
24	.00000	.36000	612.00	.4060-01	.4960-01	.5660-01	.9220	.2888-02	.2068-02	.4190	2.836	534.5
24	.00000	.37000	613.00	.4440-01	.5440-01	.6230-01	.9220	.3178-02	.2263-02	.4520	3.052	537.5
24	.00000	.37500	614.00	.4760-01	.5860-01	.6720-01	.9220	.3429-02	.2430-02	.4800	3.236	539.8
26	.00000	.38000	615.00	.5030-01	.6170-01	.7060-01	.9220	.3600-02	.2568-02	.5180	3.495	539.2
26	.00000	.38500	616.00	.4950-01	.6070-01	.6960-01	.9220	.3552-02	.2524-02	.5040	3.399	541.2
26	.00000	.39500	618.00	.6270-01	.7830-01	.9080-01	.9220	.4634-02	.3201-02	.5980	4.017	554.1
26	.00000	.40000	619.00	.6680-01	.8400-01	.9810-01	.9220	.5006-02	.3410-02	.6180	4.114	559.7
26	.00000	.40500	620.00	.8040-01	.1010	.1179	.9220	.6017-02	.4101-02	.7440	4.972	559.4
26	.00000	.41000	621.00	.1024	.1299	.1529	.9220	.7802-02	.5226-02	.9150	6.090	565.9
26	.00000	.41500	622.00	.1289	.1642	.1940	.9220	.9898-02	.6577-02	1.133	7.508	568.7
26	.00000	.43000	625.00	.1785	.2310	.2765	.9220	.1411-01	.9105-02	1.484	9.819	578.0
26	.00000	.44000	626.00	.2401	.3162	.3845	.9220	.1962-01	.1225-01	1.884	12.41	587.1
26	.00000	.44500	627.00	.2453	.3233	.3933	.9220	.2007-01	.1251-01	1.921	12.77	587.4
26	.00000	.45000	628.00	.2161	.2801	.3358	.9220	.1713-01	.1103-01	1.788	11.94	578.7
26	.00000	.45500	629.00	.1737	.2231	.2654	.9220	.1354-01	.8864-02	1.483	10.08	573.6
24	.00000	.46000	630.00	.1463	.1906	.2294	.9220	.1170-01	.7464-02	1.186	7.845	578.4
24	.00000	.47000	631.00	.1143	.1460	.1729	.9220	.8818-02	.5833-02	.9910	6.591	567.3
24	.00000	.48000	632.00	.1028	.1303	.1532	.9220	.7813-02	.5244-02	.9170	6.152	562.3
24	.00000	.49000	633.00	.8710-01	.1094	.1277	.9220	.6514-02	.4445-02	.8050	5.466	556.2
24	.00000	.50000	634.00	.6810-01	.8490-01	.9860-01	.9220	.5032-02	.3472-02	.6440	4.495	551.7
24	.00000	.55000	635.00	.4910-01	.6060-01	.6970-01	.9220	.3556-02	.2505-02	.4870	3.243	542.6
24	.00000	.60000	636.00	.4680-01	.5740-01	.6580-01	.9220	.3354-02	.2387-02	.4760	3.082	537.9
24	.00000	.65000	637.00	.2940-01	.3600-01	.4120-01	.9220	.2101-02	.1502-02	.3030	1.969	535.6
24	.00000	.70000	638.00	.2820-01	.3470-01	.3970-01	.9220	.2027-02	.1440-02	.2860	1.968	538.4
24	.00000	.75000	639.00	.1420-01	.1740-01	.1980-01	.9220	.1010-02	.7259-03	.1480	.9630	532.8
24	.00000	.80000	640.00	.4590-01	.5650-01	.6490-01	.9220	.3312-02	.2343-02	.4600	2.894	540.7
24	.00000	.85000	641.00	.6880-01	.8540-01	.9870-01	.9220	.5032-02	.3512-02	.6680	4.223	546.9
24	.00000	.87000	643.00	.1407	.1788	.2108	.9220	.1075-01	.7174-02	1.240	7.923	564.4
24	.00000	.88000	644.00	.1314	.1680	.1991	.9220	.1015-01	.6703-02	1.134	7.301	568.0
26	.00000	.95000	649.00	.5770-01	.7150-01	.8250-01	.9220	.4208-02	.2945-02	.5670	4.131	548.5
48	5.6250	.42500	2170.0	.1355	.1760	.2113	.9220	.1078-01	.6914-02	1.127	7.188	586.7
48	5.6250	.43000	2175.0	.1905	.2532	.3104	.9220	.1583-01	.9719-02	1.472	9.331	598.3
48	5.6250	.44000	2180.0	.1899	.2551	.3158	.9220	.1611-01	.9688-02	1.421	8.989	603.1
26	11.250	.35000	650.00	.4660-01	.5680-01	.6470-01	.9220	.3301-02	.2377-02	.4910	3.320	534.4
26	11.250	.36000	651.00	.4670-01	.5700-01	.6500-01	.9220	.3314-02	.2383-02	.4900	3.326	535.2
26	11.250	.37000	652.00	.5240-01	.6400-01	.7310-01	.9220	.3727-02	.2672-02	.5460	3.687	536.7
26	11.250	.37500	653.00	.1880-01	.2290-01	.2600-01	.9220	.1328-02	.9598-03	.2000	1.358	532.5
26	11.250	.38000	654.00	.5100-01	.6230-01	.7120-01	.9220	.3630-02	.2602-02	.5310	3.597	536.9
26	11.250	.39000	656.00	.5870-01	.7190-01	.8240-01	.9220	.4203-02	.2993-02	.6000	4.061	540.3
26	11.250	.39500	657.00	.6360-01	.7850-01	.9020-01	.9220	.4603-02	.3247-02	.6370	4.297	544.8
26	11.250	.40500	659.00	.7910-01	.9960-01	.1164	.9220	.5938-02	.4037-02	.7290	4.895	560.4
26	11.250	.41000	660.00	.9260-01	.1169	.1371	.9220	.6992-02	.4723-02	.8410	5.624	562.9
26	11.250	.41500	661.00	.1183	.1506	.1777	.9220	.9068-02	.6035-02	1.043	6.935	568.1

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT24)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
26	11.250	.42000	662.00	.1518	.1974	.2373	.9220	.1210-01	.7743-02	1.242	8.233	580.5
26	11.250	.42500	663.00	.1832	.2411	.2930	.9220	.1495-01	.9349-02	1.443	9.563	586.6
26	11.250	.43000	664.00	.2025	.2717	.3358	.9220	.1713-01	.1033-01	1.504	10.02	595.3
26	11.250	.44000	665.00	.1967	.2644	.3276	.9220	.1671-01	.1004-01	1.452	9.609	596.3
26	11.250	.45000	666.00	.2244	.3028	.3763	.9220	.1920-01	.1145-01	1.640	10.84	597.7
26	11.250	.46000	668.00	.2043	.2737	.3380	.9220	.1725-01	.1042-01	1.523	10.12	594.8
26	11.250	.47000	669.00	.1828	.2421	.2958	.9220	.1509-01	.9328-02	1.412	9.430	589.6
26	11.250	.48000	670.00	.1425	.1859	.2242	.9220	.1144-01	.7272-02	1.154	7.737	582.2
26	11.250	.49000	671.00	.1415	.1829	.2189	.9220	.1117-01	.7219-02	1.180	7.907	577.4
26	11.250	.50000	672.00	.1389	.1800	.2157	.9220	.1101-01	.7087-02	1.150	7.871	578.6
26	11.250	.70000	674.00	.4960-01	.6140-01	.7080-01	.9220	.3611-02	.2531-02	.4890	3.327	547.7
26	11.250	.85000	676.00	.9100-01	.1138	.1323	.9220	.6752-02	.4643-02	.8590	5.436	555.9
26	11.250	.86000	677.00	.1005	.1264	.1478	.9220	.7541-02	.5127-02	.9250	5.875	560.4
26	11.250	.87000	678.00	.1037	.1312	.1541	.9220	.7863-02	.5290-02	.9350	5.974	564.3
26	11.250	.88000	679.00	.1137	.1452	.1719	.9220	.8770-02	.5802-02	.9910	6.389	570.1
26	11.250	.90000	681.00	.1166	.1515	.1822	.9220	.9295-02	.5946-02	.9540	6.324	580.5
26	11.250	.91000	682.00	.8860-01	.1158	.1399	.9220	.7139-02	.4520-02	.7120	5.099	583.4
26	11.250	.92600	683.00	.2490	.3850	.5548	.9220	.2831-01	.1270-01	1.332	9.326	636.1
26	11.250	.95000	684.00	.5960-01	.7410-01	.8590-01	.9220	.4380-02	.3041-02	.5750	4.142	551.9
26	17.000	.33000	685.00	.4200-01	.5130-01	.5850-01	.9220	.2987-02	.2144-02	.4390	2.965	536.2
26	17.000	.34000	686.00	.4930-01	.6030-01	.6900-01	.9220	.3520-02	.2516-02	.5090	3.438	538.4
26	17.000	.35000	687.00	.5010-01	.6120-01	.6990-01	.9220	.3569-02	.2555-02	.5200	3.509	537.5
48	17.000	.35500	2102.0	.4990-01	.6080-01	.6930-01	.9220	.3534-02	.2545-02	.5320	3.493	540.7
26	17.000	.36000	688.00	.4540-01	.5520-01	.6290-01	.9220	.3208-02	.2315-02	.4810	3.254	533.3
26	17.000	.37000	689.00	.4000-01	.4840-01	.5480-01	.9220	.2794-02	.2040-02	.4370	2.966	526.8
26	17.000	.37500	690.00	.3860-01	.4660-01	.5270-01	.9220	.2688-02	.1967-02	.4240	2.886	525.6
48	17.000	.42500	2171.0	.1528	.1983	.2381	.9220	.1215-01	.7793-02	1.271	7.990	586.6
48	17.000	.43000	2176.0	.1539	.2012	.2432	.9220	.1241-01	.7849-02	1.250	7.953	590.5
24	17.000	.50000	691.00	.2201	.2885	.3494	.9220	.1782-01	.1123-01	1.744	11.52	581.8
24	17.000	.60000	692.00	.8280-01	.1020	.1172	.9220	.5979-02	.4222-02	.8260	5.342	541.5
24	17.000	.70000	693.00	.6050-01	.7530-01	.8720-01	.9220	.4450-02	.3085-02	.5790	3.918	549.7
24	17.000	.80000	694.00	.6530-01	.8110-01	.9380-01	.9220	.4784-02	.3331-02	.6310	3.961	547.9
24	17.000	.92600	696.00	.3123	.5429	.9256	.9220	.4721-01	.1593-01	1.382	9.613	650.4
48	20.980	.36000	2099.0	.4670-01	.5650-01	.6410-01	.9220	.3269-02	.2384-02	.5150	3.410	533.9
48	20.980	.36500	2100.0	.4440-01	.5350-01	.6050-01	.9220	.3087-02	.2265-02	.4970	3.302	530.1
48	23.070	.35500	2094.0	.5520-01	.6760-01	.7720-01	.9220	.3938-02	.2818-02	.5800	3.822	544.0
48	23.070	.36000	2095.0	.5070-01	.6150-01	.6990-01	.9220	.3568-02	.2585-02	.5490	3.629	537.5
48	23.070	.36500	2096.0	.4570-01	.5520-01	.6240-01	.9220	.3184-02	.2331-02	.5090	3.375	531.5
47	23.070	.43500	2000.0	.1532	.2000	.2412	.9220	.1230-01	.7814-02	1.251	7.856	588.9
47	23.070	.56890	2001.0	.9250-01	.1176	.1386	.9220	.7068-02	.4720-02	.8300	5.606	573.2
47	23.070	.70270	2002.0	.6700-01	.8500-01	.1000+00	.9220	.5101-02	.3418-02	.6050	4.261	572.0
47	23.070	.83500	2003.0	.9360-01	.1195	.1414	.9220	.7210-02	.4772-02	.8240	5.162	576.3
47	23.070	.90000	2004.0	.1129	.1501	.1840	.9220	.9385-02	.5758-02	.8710	5.704	597.9

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT24)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
48	23.070	.92600	2154.0	.2373	.3502	.4775	.9220	.2436-01	.1211-01	1.408	9.616	633.5
24	29.800	.70000-01	700.00	.3361	.4475	.4524	.9484	.2308-01	.1714-01	2.539	16.81	589.1
24	29.800	.10000+00	701.00	.2815	.3601	.3814	.9400	.1945-01	.1436-01	2.425	15.29	568.3
24	29.800	.15000	702.00	.1696	.2130	.2378	.9296	.1213-01	.8649-02	1.564	11.14	556.3
24	29.800	.20000	703.00	.9370-01	.1145	.1297	.9236	.6615-02	.4780-02	.9700	6.504	534.2
24	29.800	.30000	704.00	.3990-01	.4900-01	.5620-01	.9220	.2868-02	.2034-02	.4020	2.858	539.6
24	29.800	.35000	705.00	.6910-01	.8560-01	.9880-01	.9220	.5041-02	.3523-02	.6720	4.604	546.3
48	29.800	.35500	2090.0	.7960-01	.9860-01	.1138	.9220	.5805-02	.4059-02	.7890	5.172	555.3
48	29.800	.36500	2092.0	.6440-01	.7940-01	.9140-01	.9220	.4662-02	.3285-02	.6500	4.257	551.8
48	29.800	.37000	2093.0	.5990-01	.7370-01	.8460-01	.9220	.4317-02	.3057-02	.6120	4.024	549.5
26	29.800	.50000	707.00	.8880-01	.1120	.1312	.9220	.6695-02	.4529-02	.8090	5.494	562.3
26	29.800	.60000	708.00	.9720-01	.1221	.1426	.9220	.7274-02	.4961-02	.9020	5.711	559.2
26	29.800	.70000	709.00	.9650-01	.1218	.1428	.9220	.7286-02	.4922-02	.8770	5.543	562.8
26	29.800	.80000	710.00	.6970-01	.8660-01	.1002	.9220	.5109-02	.3558-02	.6770	4.211	550.6
48	31.430	.44000	2166.0	.1721	.2263	.2748	.9220	.1402-01	.8777-02	1.373	8.907	593.4
47	31.430	.47600	2005.0	.7600-01	.9560-01	.1118	.9220	.5703-02	.3874-02	.7060	4.639	566.9
47	31.430	.51100	2006.0	.8530-01	.1082	.1273	.9220	.6493-02	.4351-02	.7700	5.207	572.0
47	31.430	.54600	2007.0	.8170-01	.1051	.1253	.9220	.6388-02	.4167-02	.7000	4.830	581.0
47	31.430	.61600	2009.0	.1542	.2035	.2480	.9220	.1265-01	.7864-02	1.214	8.117	594.6
47	31.430	.65000	2010.0	.1222	.1578	.1885	.9220	.9616-02	.6235-02	1.036	7.073	582.9
47	31.430	.68600	2014.0	.1144	.1492	.1797	.9220	.9164-02	.5837-02	.9390	6.415	588.2
47	31.430	.72050	2015.0	.6940-01	.8880-01	.1053	.9220	.5370-02	.3542-02	.6080	4.440	577.4
47	31.430	.79040	2017.0	.5850-01	.7490-01	.8900-01	.9220	.4538-02	.2981-02	.5080	3.158	578.7
47	31.430	.86000	2019.0	.1860-01	.2280-01	.2600-01	.9220	.1326-02	.9506-03	.1960	1.267	542.8
47	31.430	.89520	2020.0	.1351	.1777	.2158	.9220	.1101-01	.6888-02	1.075	6.837	592.9
48	31.430	.92600	2153.0	.3091	.4679	.6568	.9220	.3351-01	.1577-01	1.742	12.14	639.3
47	33.750	.25000	2079.0	.4130-01	.5130-01	.5940-01	.9220	.3029-02	.2106-02	.4040	3.296	557.4
47	33.750	.30000	2080.0	.6660-01	.8310-01	.9660-01	.9220	.4924-02	.3396-02	.6390	4.178	560.8
47	33.750	.37500	2081.0	.7020-01	.8750-01	.1016	.9220	.5180-02	.3579-02	.6760	4.460	560.2
47	33.750	.40000	2082.0	.1113	.1446	.1737	.9220	.8861-02	.5675-02	.9220	6.002	586.6
47	33.750	.45000	2084.0	.1115	.1408	.1651	.9220	.8420-02	.5687-02	1.024	6.722	569.1
47	33.750	.60000	2085.0	.1057	.1344	.1585	.9220	.8085-02	.5391-02	.9450	6.192	573.8
48	33.750	.65000	2086.0	.1427	.1823	.2158	.9220	.1101-01	.7282-02	1.257	8.298	577.1
48	33.750	.92600	2152.0	.2786	.3999	.5289	.9220	.2698-01	.1421-01	1.755	12.31	626.2
47	36.320	.25000	2066.0	.9040-01	.1137	.1327	.9221	.6769-02	.4612-02	.8450	5.557	565.9
47	36.320	.30000	2067.0	.6370-01	.7950-01	.9220-01	.9221	.4705-02	.3249-02	.6130	4.008	560.4
47	36.320	.35000	2069.0	.6280-01	.7810-01	.9040-01	.9221	.4610-02	.3205-02	.6140	4.058	557.4
47	36.320	.37500	2070.0	.7150-01	.8880-01	.1027	.9221	.5240-02	.3647-02	.7000	4.627	557.0
47	36.320	.40000	2071.0	.9750-01	.1238	.1458	.9221	.7434-02	.4973-02	.8770	5.748	572.7
47	36.320	.42000	2072.0	.1000+00	.1269	.1495	.9220	.7626-02	.5098-02	.8990	5.890	572.8
47	36.320	.42500	2073.0	.1157	.1479	.1751	.9221	.8929-02	.5900-02	1.015	6.642	577.0
47	36.320	.43000	2074.0	.1177	.1501	.1773	.9221	.9043-02	.6003-02	1.043	6.827	575.4
47	36.320	.43500	2075.0	.1361	.1761	.2107	.9221	.1075-01	.6943-02	1.145	7.465	584.1

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT24)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
47	36.320	.60000	2077.0	.9450-01	.1192	.1397	.9221	.7127-02	.4818-02	.8680	5.753	568.9
47	36.320	.65000	2078.0	.1341	.1751	.2112	.9221	.1077-01	.6840-02	1.094	7.332	589.1
26	37.700	.50000-01	715.00	.3445	.4447	.4270	.9571	.2178-01	.1757-01	2.888	18.56	576.6
26	37.700	.70000-01	716.00	.3788	.5206	.5182	.9506	.2644-01	.1933-01	2.629	17.43	604.9
26	37.700	.10000+00	717.00	.2831	.3619	.3788	.9420	.1932-01	.1444-01	2.457	15.75	570.8
26	37.700	.15000	718.00	.1498	.1863	.2052	.9310	.1047-01	.7643-02	1.447	10.57	551.6
26	37.700	.20000	719.00	.7180-01	.8700-01	.9770-01	.9243	.4985-02	.3661-02	.7730	5.257	529.8
26	37.700	.30000	720.00	.4060-01	.4970-01	.5680-01	.9221	.2897-02	.2072-02	.4200	3.016	538.3
24	37.700	.35000	721.00	.5910-01	.7280-01	.8370-01	.9221	.4267-02	.3012-02	.5880	4.087	541.9
24	37.700	.37500	722.00	.6810-01	.8390-01	.9640-01	.9221	.4916-02	.3473-02	.6790	4.721	541.6
24	37.700	.50000	723.00	.6580-01	.8090-01	.9270-01	.9221	.4730-02	.3357-02	.6640	4.605	539.4
24	37.700	.60000	724.00	.9660-01	.1200	.1388	.9221	.7079-02	.4929-02	.9320	5.955	548.1
24	37.700	.70000	725.00	.9810-01	.1236	.1447	.9221	.7380-02	.5002-02	.8910	5.632	559.0
24	37.700	.80000	726.00	.7360-01	.9170-01	.1063	.9221	.5424-02	.3753-02	.7000	4.390	550.7
24	37.700	.87000	727.00	.1311	.1692	.2021	.9221	.1031-01	.6688-02	1.094	6.900	573.6
24	37.700	.92600	728.00	.1986	.2710	.3404	.9221	.1736-01	.1013-01	1.397	9.892	599.3
25	39.000	.10000-01	993.00	.4708	.7253	.6191	.9659	.3156-01	.2400-01	2.526	17.59	633.4
25	39.000	.25000-01	994.00	.3318	.4335	.3973	.9649	.2025-01	.1691-01	2.662	17.80	581.3
47	45.000	.25000	2036.0	.3440-01	.4260-01	.4910-01	.9223	.2506-02	.1754-02	.3400	2.743	555.0
47	45.000	.32500	2038.0	.5690-01	.7050-01	.8120-01	.9223	.4143-02	.2902-02	.5640	3.848	554.6
47	45.000	.35000	2039.0	.6910-01	.8560-01	.9860-01	.9223	.5029-02	.3525-02	.6860	4.609	554.4
47	45.000	.37500	2040.0	.7180-01	.8900-01	.1027	.9223	.5238-02	.3660-02	.7070	4.747	555.8
47	45.000	.40000	2041.0	.5860-01	.7230-01	.8310-01	.9223	.4239-02	.2987-02	.5890	3.960	551.9
47	45.000	.42000	2042.0	.5210-01	.6430-01	.7390-01	.9223	.3771-02	.2657-02	.5230	3.520	552.0
47	45.000	.42500	2043.0	.5870-01	.7260-01	.8360-01	.9223	.4265-02	.2991-02	.5830	3.919	554.0
47	45.000	.43000	2044.0	.6870-01	.8550-01	.9890-01	.9223	.5047-02	.3503-02	.6670	4.468	558.7
47	45.000	.43500	2045.0	.7370-01	.9200-01	.1066	.9223	.5436-02	.3760-02	.7100	4.755	560.2
47	45.000	.44000	2046.0	.7640-01	.9530-01	.1104	.9223	.5633-02	.3897-02	.7360	4.930	560.2
47	45.000	.45000	2047.0	.6610-01	.8250-01	.9550-01	.9223	.4872-02	.3373-02	.6380	4.300	559.9
47	45.000	.47000	2048.0	.4910-01	.6090-01	.7040-01	.9223	.3589-02	.2503-02	.4820	3.281	556.7
47	45.000	.55000	2049.0	.3180-01	.3950-01	.4560-01	.9223	.2326-02	.1624-02	.3140	2.143	556.1
47	45.000	.60000	2050.0	.8050-01	.1012	.1180	.9223	.6019-02	.4104-02	.7510	5.015	566.0
47	45.000	.65000	2051.0	.1604	.2053	.2431	.9223	.1240-01	.8179-02	1.399	9.173	578.0
47	45.000	.75000	2052.0	.7470-01	.9450-01	.1108	.9223	.5653-02	.3808-02	.6790	4.265	570.7
47	45.000	.80000	2053.0	.9980-01	.1266	.1487	.9223	.7583-02	.5090-02	.9010	5.593	572.0
47	45.000	.83000	2054.0	.1209	.1547	.1831	.9223	.9339-02	.6167-02	1.057	6.523	577.6
47	45.000	.84000	2055.0	.1914	.2507	.3027	.9223	.1544-01	.9760-02	1.545	9.469	590.8
47	45.000	.85000	2056.0	.1750	.2276	.2730	.9223	.1392-01	.8928-02	1.449	9.027	586.8
47	45.000	.86000	2057.0	.1147	.1456	.1712	.9223	.8733-02	.5852-02	1.033	6.634	572.5
47	45.000	.87000	2058.0	.1167	.1494	.1769	.9223	.9025-02	.5950-02	1.017	6.668	578.2
47	45.000	.89000	2060.0	.1216	.1577	.1888	.9223	.9627-02	.6203-02	1.016	6.655	585.4
47	45.000	.90000	2061.0	.1072	.1393	.1671	.9223	.8520-02	.5467-02	.8880	5.836	586.6
47	45.000	.91000	2062.0	.3120-01	.3880-01	.4500-01	.9223	.2294-02	.1591-02	.3020	2.457	559.1

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT24)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
47	45.000	.92600	2063.0	.1644	.2248	.2823	.9223	.1440-01	.8387-02	1.170	8.007	609.6
47	45.000	.93500	2064.0	.2060	.2967	.3924	.9223	.2001-01	.1051-01	1.288	9.246	626.5
47	45.000	.94500	2065.0	.1055	.1360	.1620	.9223	.8263-02	.5381-02	.8990	5.863	582.1
24	180.00	.15000-01	2182.0	.4605	.7299	.5821	.9717	.2969-01	.2349-01	2.346	16.87	637.3
24	180.00	.20000-01	2183.0	.4498	.6459	.5472	.9707	.2791-01	.2294-01	2.786	20.44	615.8
24	180.00	.25000-01	2184.0	.4074	.5541	.4822	.9707	.2460-01	.2078-01	2.893	20.57	598.0
24	180.00	.30000-01	2185.0	.2106	.2731	.2434	.9705	.1242-01	.1074-01	1.729	12.35	576.2
24	180.00	.40000-01	737.00	.3652	.4829	.4358	.9668	.2223-01	.1863-01	2.815	18.01	586.1
24	180.00	.45000-01	738.00	.3819	.5057	.4610	.9650	.2352-01	.1948-01	2.932	19.03	586.7
24	180.00	.60000-01	739.00	.3361	.4384	.4140	.9597	.2112-01	.1714-01	2.708	17.91	579.2
24	180.00	.70000-01	740.00	.3062	.3981	.3835	.9563	.1956-01	.1562-01	2.493	16.60	577.6
24	180.00	.80000-01	741.00	.2900	.3763	.3694	.9531	.1884-01	.1479-01	2.376	17.02	576.6
24	180.00	.10000+00	742.00	.2450	.3121	.3170	.9472	.1617-01	.1250-01	2.142	14.17	565.8
24	180.00	.12500	743.00	.1967	.2487	.2619	.9405	.1336-01	.1003-01	1.767	12.76	561.0
24	180.00	.15000	744.00	.1644	.2058	.2229	.9348	.1137-01	.8384-02	1.534	10.63	554.2
24	180.00	.17500	745.00	.9600-01	.1194	.1323	.9302	.6746-02	.4896-02	.9190	6.902	549.4
24	180.00	.20000	746.00	.8250-01	.1016	.1140	.9265	.5815-02	.4208-02	.8250	5.919	541.1
24	180.00	.21500	747.00	.7200-01	.8990-01	.1028	.9248	.5246-02	.3673-02	.6790	4.694	552.3
24	180.00	.23000	748.00	.6150-01	.7670-01	.8830-01	.9235	.4504-02	.3135-02	.5820	4.293	551.5
24	180.00	.24000	749.00	.4990-01	.6240-01	.7220-01	.9228	.3680-02	.2545-02	.4690	3.530	552.8
24	180.00	.25000	750.00	.2880-01	.3570-01	.4090-01	.9228	.2089-02	.1469-02	.2820	2.281	545.4
24	180.00	.30000	751.00	.5700-01	.7090-01	.8170-01	.9228	.4166-02	.2905-02	.5460	3.578	549.3
24	180.00	.35000	752.00	.5700-01	.7050-01	.8090-01	.9228	.4127-02	.2907-02	.5590	3.539	544.8
24	180.00	.40000	753.00	.5940-01	.7350-01	.8430-01	.9228	.4298-02	.3032-02	.5860	3.770	544.1
24	180.00	.50000	754.00	.4530-01	.5570-01	.6360-01	.9228	.3247-02	.2313-02	.4580	3.006	539.3
24	180.00	.60000	755.00	.5800-01	.7180-01	.8240-01	.9228	.4206-02	.2956-02	.5660	3.632	545.7
24	180.00	.70000	756.00	.5000-01	.6180-01	.7080-01	.9228	.3610-02	.2552-02	.4950	3.275	543.2
24	180.00	.80000	757.00	.4770-01	.5870-01	.6720-01	.9228	.3428-02	.2432-02	.4760	2.993	541.4
24	180.00	.90000	758.00	.3460-01	.4270-01	.4880-01	.9228	.2491-02	.1766-02	.3450	2.240	541.6
24	235.00	.22000	759.00	.2740-01	.3350-01	.3830-01	.9220	.1952-02	.1399-02	.2840	2.127	534.2
24	235.00	.25000	760.00	.1050-01	.1280-01	.1450-01	.9220	.7393-03	.5359-03	.1120	.8860	528.2
24	235.00	.30000	762.00	.3250-01	.3990-01	.4570-01	.9220	.2333-02	.1657-02	.3290	1.985	538.8
24	235.00	.32000	763.00	.5970-01	.7400-01	.8540-01	.9220	.4357-02	.3043-02	.5800	3.432	546.6
24	235.00	.34000	764.00	.6590-01	.8190-01	.9480-01	.9220	.4835-02	.3361-02	.6340	3.758	548.6
24	235.00	.36000	765.00	.5130-01	.6310-01	.7250-01	.9220	.3698-02	.2617-02	.5150	3.105	540.5
24	235.00	.38000	766.00	.5210-01	.6420-01	.7370-01	.9220	.3758-02	.2659-02	.5230	3.190	540.5
26	247.00	.23000	768.00	.1960-01	.2380-01	.2700-01	.9220	.1377-02	.9994-03	.2110	1.580	530.3
26	247.00	.25000	769.00	.8200-02	.9900-02	.1120-01	.9220	.5722-03	.4201-03	.9100-01	.7190	523.5
26	247.00	.30000	772.00	.5620-01	.6940-01	.7990-01	.9220	.4078-02	.2866-02	.5580	3.409	546.4
26	247.00	.31000	773.00	.6380-01	.7890-01	.9110-01	.9220	.4648-02	.3252-02	.6260	3.793	548.4
26	247.00	.32000	774.00	.6800-01	.8420-01	.9710-01	.9220	.4954-02	.3471-02	.6700	4.027	547.9
26	247.00	.32500	775.00	.7370-01	.9140-01	.1056	.9220	.5388-02	.3762-02	.7200	4.337	549.5
26	247.00	.33000	776.00	.7990-01	.9930-01	.1149	.9220	.5861-02	.4075-02	.7730	4.660	551.3

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF

(RVZT24)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
26	247.00	.33500	777.00	.8570-01	.1071	.1245	.9220	.6350-02	.4374-02	.8120	4.888	555.3
26	247.00	.34000	778.00	.8350-01	.1044	.1213	.9220	.6189-02	.4262-02	.7910	4.763	555.3
26	247.00	.34500	779.00	.9630-01	.1212	.1417	.9220	.7228-02	.4914-02	.8870	5.340	560.4
26	247.00	.35000	780.00	.1133	.1441	.1700	.9220	.8675-02	.5781-02	1.002	6.026	567.7
26	247.00	.35500	781.00	.9950-01	.1254	.1467	.9220	.7486-02	.5077-02	.9120	5.518	561.3
24	247.00	.36000	782.00	.1064	.1355	.1600	.9220	.8163-02	.5427-02	.9310	5.621	565.7
24	247.00	.36500	783.00	.1083	.1378	.1627	.9220	.8299-02	.5523-02	.9500	5.720	565.3
24	247.00	.37000	784.00	.9420-01	.1196	.1409	.9220	.7185-02	.4804-02	.8340	5.052	563.7
24	247.00	.37500	785.00	.9560-01	.1213	.1428	.9220	.7284-02	.4875-02	.8480	5.182	563.3
24	247.00	.38000	786.00	.9490-01	.1197	.1403	.9220	.7156-02	.4839-02	.8590	5.274	559.7
24	247.00	.39000	787.00	.7470-01	.9330-01	.1084	.9220	.5527-02	.3811-02	.7060	4.361	552.0
24	247.00	.40000	788.00	.5390-01	.6710-01	.7770-01	.9220	.3965-02	.2750-02	.5160	3.222	549.5
25	247.00	.50000	789.00	.6050-01	.7450-01	.8550-01	.9220	.4361-02	.3084-02	.6070	3.901	541.8
25	247.00	.60000	790.00	.8820-01	.1101	.1278	.9220	.6516-02	.4495-02	.8350	5.461	552.9
25	247.00	.70000	791.00	.7480-01	.9280-01	.1072	.9220	.5462-02	.3814-02	.7280	5.139	547.8
25	247.00	.80000	792.00	.6020-01	.7420-01	.8540-01	.9220	.4352-02	.3067-02	.5990	3.770	543.4
25	247.00	.90000	793.00	.4110-01	.5060-01	.5800-01	.9220	.2958-02	.2095-02	.4140	2.678	541.0
48	247.00	.92600	2144.0	.7560-01	.9780-01	.1170	.9220	.5968-02	.3858-02	.6380	4.382	584.3
48	247.00	.93000	2149.0	.9180-01	.1206	.1463	.9220	.7463-02	.4684-02	.7360	5.195	592.7
48	250.57	.92600	2143.0	.8270-01	.1079	.1300	.9220	.6634-02	.4220-02	.6780	4.645	589.1
48	250.57	.93000	2148.0	.1083	.1448	.1784	.9220	.9103-02	.5523-02	.8210	5.646	601.0
48	250.57	.93700	2087.0	.2241	.3100	.3946	.9220	.2013-01	.1143-01	1.548	10.67	614.4
25	258.00	.29000	795.00	.4790-01	.5850-01	.6690-01	.9220	.3409-02	.2439-02	.4940	3.061	536.1
46	258.00	.32000	798.00	.1259	.1649	.1995	.9220	.1017-01	.6417-02	1.016	5.990	590.7
46	258.00	.34000	802.00	.1975	.2649	.3277	.9220	.1671-01	.1007-01	1.480	8.703	602.0
46	258.00	.34500	803.00	.1941	.2586	.3177	.9220	.1620-01	.9894-02	1.486	8.775	598.9
46	258.00	.35500	805.00	.1661	.2176	.2634	.9220	.1343-01	.8468-02	1.339	7.943	590.8
46	258.00	.36000	806.00	.1505	.1957	.2354	.9220	.1200-01	.7673-02	1.243	7.408	587.0
46	258.00	.36500	807.00	.1429	.1849	.2213	.9220	.1128-01	.7287-02	1.203	7.194	584.0
46	258.00	.37000	808.00	.1260	.1603	.1892	.9220	.9646-02	.6424-02	1.124	6.775	574.1
46	258.00	.37500	809.00	.1049	.1315	.1534	.9220	.7818-02	.5346-02	.9870	5.983	564.3
46	258.00	.38000	810.00	.7780-01	.9660-01	.1117	.9220	.5696-02	.3969-02	.7650	4.676	556.3
25	258.00	.40000	812.00	.4580-01	.5640-01	.6480-01	.9220	.3301-02	.2336-02	.4600	2.845	541.5
48	258.00	.93500	2151.0	.1329	.1792	.2227	.9220	.1136-01	.6780-02	.9830	6.746	604.8
25	270.00	.40000-01	985.00	.2628	.3362	.3467	.9445	.1767-01	.1339-01	2.265	14.57	569.5
25	270.00	.50000-01	986.00	.2860	.3660	.3843	.9415	.1959-01	.1458-01	2.462	15.74	569.7
25	270.00	.60000-01	987.00	.2465	.3114	.3310	.9387	.1687-01	.1256-01	2.227	14.55	561.4
25	270.00	.70000-01	988.00	.2163	.2721	.2931	.9362	.1494-01	.1102-01	1.984	13.25	558.7
25	270.00	.80000-01	989.00	.1736	.2168	.2358	.9338	.1202-01	.8848-02	1.639	11.58	553.3
25	270.00	.10000+00	990.00	.1362	.1677	.1849	.9298	.9427-02	.6943-02	1.366	8.936	541.8
25	270.00	.15000	991.00	.6170-01	.7500-01	.8470-01	.9234	.4320-02	.3143-02	.6520	4.828	531.1
25	270.00	.20000	992.00	.3070-01	.3700-01	.4190-01	.9220	.2134-02	.1563-02	.3370	2.307	523.1
25	270.00	.23000	813.00	.1500-01	.1820-01	.2060-01	.9220	.1051-02	.7662-03	.1630	1.196	526.2

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT24)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
25	270.00	.24000	814.00	.9600-02	.1160-01	.1310-01	.9220	.6679-03	.4878-03	.1040	.8520	525.0
25	270.00	.25000	815.00	.4100-02	.4900-02	.5500-02	.9220	.2812-03	.2080-03	.4600-01	.3680	517.4
25	270.00	.27000	816.00	.5100-02	.6200-02	.7000-02	.9220	.3556-03	.2624-03	.5800-01	.4160	518.8
25	270.00	.29000	817.00	.8930-01	.1119	.1304	.9220	.6649-02	.4552-02	.8320	5.144	556.0
25	270.00	.30000	818.00	.1599	.2066	.2470	.9220	.1259-01	.8148-02	1.331	8.017	575.3
25	270.00	.31000	819.00	.1776	.2300	.2754	.9220	.1404-01	.9055-02	1.470	8.779	576.3
25	270.00	.32000	820.00	.2452	.3192	.3843	.9220	.1959-01	.1250-01	1.989	11.83	579.5
25	270.00	.32500	821.00	.2087	.2732	.3304	.9220	.1684-01	.1064-01	1.664	9.857	582.2
25	270.00	.33000	822.00	.2543	.3347	.4066	.9220	.2073-01	.1296-01	1.994	11.83	584.8
25	270.00	.33500	823.00	.2352	.3104	.3781	.9220	.1927-01	.1199-01	1.827	10.86	586.2
25	270.00	.34500	825.00	.3202	.4322	.5375	.9220	.2740-01	.1632-01	2.326	13.72	596.1
25	270.00	.35000	826.00	.2858	.3780	.4613	.9220	.2352-01	.1457-01	2.206	13.07	587.2
25	270.00	.36000	828.00	.2518	.3350	.4111	.9220	.2095-01	.1284-01	1.909	11.26	589.9
25	270.00	.37000	830.00	.1590-01	.1940-01	.2200-01	.9220	.1122-02	.8128-03	.1700	1.039	529.7
25	270.00	.37500	831.00	.6380-01	.7790-01	.8880-01	.9220	.4527-02	.3254-02	.6660	4.088	533.9
25	270.00	.38000	832.00	.4630-01	.5640-01	.6430-01	.9220	.3277-02	.2363-02	.4880	2.996	532.1
25	270.00	.39000	833.00	.4320-01	.5260-01	.5990-01	.9220	.3051-02	.2202-02	.4560	2.829	531.7
25	270.00	.40000	834.00	.3980-01	.4830-01	.5490-01	.9220	.2797-02	.2030-02	.4270	2.661	528.5
25	270.00	.50000	835.00	.6430-01	.7940-01	.9140-01	.9220	.4660-02	.3279-02	.6380	4.036	544.2
25	270.00	.60000	836.00	.7430-01	.9200-01	.1063	.9220	.5418-02	.3786-02	.7240	4.824	547.3
25	270.00	.70000	837.00	.6170-01	.7620-01	.8770-01	.9220	.4470-02	.3145-02	.6110	4.309	544.3
25	270.00	.80000	838.00	.3870-01	.4730-01	.5400-01	.9220	.2754-02	.1974-02	.4010	2.508	535.3
25	270.00	.90000	839.00	.5820-01	.7210-01	.8320-01	.9220	.4242-02	.2966-02	.5680	3.632	547.1
48	270.00	.92600	2141.0	.1522	.2034	.2508	.9220	.1279-01	.7762-02	1.154	7.691	601.0
48	270.00	.93000	2146.0	.1723	.2342	.2931	.9220	.1495-01	.8789-02	1.247	8.540	607.9
48	270.00	.93500	2150.0	.1380	.1791	.2149	.9220	.1097-01	.7038-02	1.149	7.959	586.4
48	289.43	.92600	2140.0	.5600-01	.7130-01	.8420-01	.9220	.4297-02	.2857-02	.4980	3.438	575.3
48	289.43	.93000	2145.0	.6080-01	.7800-01	.9270-01	.9220	.4730-02	.3104-02	.5280	3.705	579.6
25	292.50	.23000	840.00	.1230-01	.1490-01	.1690-01	.9220	.8600-03	.6252-03	.1320	1.074	527.5
25	292.50	.25000	841.00	.2900-02	.3400-02	.3900-02	.9220	.1968-03	.1456-03	.3200-01	.2540	517.3
25	292.50	.35000	845.00	.7830-01	.9730-01	.1127	.9220	.5742-02	.3992-02	.7550	4.618	549.6
25	292.50	.37000	846.00	.6620-01	.8110-01	.9270-01	.9220	.4725-02	.3377-02	.6820	4.224	536.7
25	292.50	.40000	847.00	.2760-01	.3340-01	.3780-01	.9220	.1927-02	.1406-02	.3000	1.890	525.3
25	292.50	.45000	848.00	.2680-01	.3250-01	.3690-01	.9220	.1882-02	.1367-02	.2880	1.826	528.1
25	292.50	.50000	849.00	.2560-01	.3110-01	.3530-01	.9220	.1798-02	.1304-02	.2740	1.775	528.9
25	292.50	.60000	851.00	.6380-01	.7850-01	.9020-01	.9220	.4596-02	.3253-02	.6410	4.310	541.5
25	292.50	.65000	852.00	.5520-01	.6760-01	.7740-01	.9220	.3945-02	.2813-02	.5650	3.861	537.8
25	292.50	.70000	853.00	.3780-01	.4610-01	.5250-01	.9220	.2676-02	.1928-02	.3970	2.809	532.5
25	292.50	.75000	854.00	.1810-01	.2190-01	.2480-01	.9220	.1263-02	.9236-03	.1980	1.300	524.1
25	292.50	.80000	855.00	.2570-01	.3130-01	.3550-01	.9220	.1810-02	.1313-02	.2750	1.805	529.1
48	292.50	.82000	2129.0	.4560-01	.5580-01	.6380-01	.9220	.3256-02	.2328-02	.4780	2.932	544.5
48	292.50	.83000	2130.0	.5480-01	.6740-01	.7730-01	.9220	.3944-02	.2794-02	.5610	3.461	549.1
48	292.50	.85000	2132.0	.6120-01	.7550-01	.8680-01	.9220	.4428-02	.3121-02	.6180	3.834	551.6

IH72. OTS W/PROTUBERANCES. EXTERNAL TANK HI/HREF (RVZT24)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
48	292.50	.86000	2133.0	.7100-01	.8780-01	.1012	.9220	.5164-02	.3622-02	.7090	4.368	553.9
48	292.50	.87000	2134.0	.8130-01	.1011	.1170	.9220	.5969-02	.4150-02	.7960	4.920	557.9
48	292.50	.88000	2135.0	.8790-01	.1097	.1274	.9220	.6499-02	.4484-02	.8460	5.220	561.1
48	292.50	.89000	2136.0	.8480-01	.1059	.1230	.9220	.6276-02	.4327-02	.8150	5.041	561.4
25	292.50	.90000	856.00	.6710-01	.8280-01	.9520-01	.9220	.4853-02	.3421-02	.6680	4.341	543.3
48	292.50	.92600	2138.0	.4890-01	.6140-01	.7160-01	.9220	.3651-02	.2496-02	.4620	3.200	564.8
48	292.50	.93000	2139.0	.5060-01	.6380-01	.7470-01	.9220	.3811-02	.2579-02	.4670	3.311	568.9
48	301.50	.82000	2116.0	.5020-01	.6170-01	.7080-01	.9220	.3614-02	.2562-02	.5150	3.153	548.8
48	301.50	.83000	2117.0	.5250-01	.6460-01	.7410-01	.9220	.3780-02	.2681-02	.5390	3.283	548.7
48	301.50	.83500	2118.0	.5310-01	.6530-01	.7490-01	.9220	.3823-02	.2710-02	.5440	3.286	548.9
48	301.50	.84000	2119.0	.5550-01	.6820-01	.7830-01	.9220	.3995-02	.2831-02	.5680	3.460	549.0
48	301.50	.85000	2120.0	.6870-01	.8470-01	.9740-01	.9220	.4970-02	.3506-02	.6960	4.244	551.2
48	301.50	.86000	2021.0	.7950-01	.9860-01	.1139	.9220	.5813-02	.4057-02	.7860	4.805	556.1
48	301.50	.87000	2122.0	.7780-01	.9630-01	.1110	.9220	.5665-02	.3970-02	.7760	4.736	554.3
48	301.50	.88000	2123.0	.7700-01	.9580-01	.1108	.9220	.5654-02	.3930-02	.7540	4.619	558.0
48	301.50	.89000	2124.0	.6800-01	.8420-01	.9730-01	.9220	.4963-02	.3467-02	.6730	4.161	555.8
48	301.50	.90000	2125.0	.5200-01	.6420-01	.7390-01	.9220	.3771-02	.2651-02	.5220	3.262	552.8
48	301.50	.92600	2127.0	.5600-01	.6980-01	.8100-01	.9220	.4133-02	.2857-02	.5410	3.369	560.3
48	301.50	.93500	2128.0	.6120-01	.7660-01	.8920-01	.9220	.4551-02	.3121-02	.5810	3.884	563.6
48	305.40	.82000	2113.0	.5020-01	.6140-01	.7020-01	.9220	.3579-02	.2559-02	.5250	3.204	544.5
48	305.40	.83000	2114.0	.5090-01	.6230-01	.7130-01	.9220	.3636-02	.2596-02	.5310	3.240	545.2
48	305.40	.83500	2115.0	.5430-01	.6690-01	.7700-01	.9220	.3927-02	.2768-02	.5490	3.365	551.5
25	305.40	.84000	857.00	.5210-01	.6360-01	.7260-01	.9220	.3702-02	.2654-02	.5400	3.359	535.1
46	305.40	.85000	858.00	.6010-01	.7390-01	.8480-01	.9220	.4324-02	.3063-02	.6140	3.811	548.6
46	305.40	.86000	859.00	.7080-01	.8750-01	.1008	.9220	.5140-02	.3612-02	.7100	4.434	552.5
46	305.40	.87000	860.00	.7110-01	.8770-01	.1010	.9220	.5149-02	.3623-02	.7140	4.477	551.9
46	305.40	.88000	861.00	.6120-01	.7550-01	.8700-01	.9220	.4434-02	.3119-02	.6140	3.851	552.0
46	305.40	.89000	862.00	.5950-01	.7370-01	.8510-01	.9220	.4336-02	.3033-02	.5900	3.712	554.6
46	305.40	.90000	863.00	.5190-01	.6410-01	.7380-01	.9220	.3764-02	.2647-02	.5210	3.303	552.1
46	305.40	.91000	864.00	.3880-01	.4780-01	.5490-01	.9220	.2800-02	.1979-02	.3940	2.861	549.8
46	305.40	.92600	865.00	.7480-01	.9400-01	.1099	.9220	.5601-02	.3814-02	.6980	5.012	565.9
46	309.30	.80000	866.00	.4500-01	.5520-01	.6320-01	.9220	.3222-02	.2297-02	.4670	2.938	545.5
46	309.30	.81000	867.00	.4410-01	.5420-01	.6210-01	.9220	.3166-02	.2247-02	.4530	2.828	547.6
46	309.30	.82000	868.00	.4520-01	.5560-01	.6370-01	.9220	.3250-02	.2305-02	.4630	2.894	548.0
46	309.30	.83000	869.00	.4600-01	.5660-01	.6500-01	.9220	.3316-02	.2346-02	.4690	2.934	549.2
46	315.00	.50000-01	871.00	.2781	.3570	.3774	.9404	.1924-01	.1418-01	2.404	15.12	579.4
46	315.00	.60000-01	872.00	.2384	.3032	.3250	.9377	.1657-01	.1215-01	2.129	13.95	573.8
25	315.00	.70000-01	873.00	.2157	.2715	.2940	.9352	.1499-01	.1100-01	1.976	13.37	558.9
25	315.00	.10000+00	875.00	.1304	.1599	.1767	.9290	.9009-02	.6646-02	1.329	8.757	538.7
25	315.00	.15000	876.00	.5720-01	.6940-01	.7840-01	.9231	.3994-02	.2917-02	.6140	4.538	528.0
25	315.00	.20000	877.00	.2370-01	.2850-01	.3220-01	.9220	.1643-02	.1208-02	.2630	1.797	520.9
25	315.00	.35000	878.00	.5490-01	.6730-01	.7700-01	.9220	.3927-02	.2799-02	.5620	3.507	538.0
25	315.00	.40000	879.00	.3140-01	.3400-01	.3570-01	.9220	.1816-02	.1600-02	.7700	5.717	257.3

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT24)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
25	315.00	.50000	880.00	.7890-01	.9710-01	.1116	.9220	.5686-02	.4020-02	.7900	5.439	542.1
25	315.00	.55000	881.00	.4120-01	.5010-01	.5700-01	.9220	.2907-02	.2099-02	.4350	2.922	531.3
25	315.00	.60000	882.00	.3390-01	.4120-01	.4680-01	.9220	.2388-02	.1729-02	.3610	2.445	530.0
25	315.00	.65000	883.00	.2480-01	.3000-01	.3400-01	.9220	.1734-02	.1262-02	.2670	1.838	527.2
25	315.00	.70000	884.00	.1800-01	.2170-01	.2460-01	.9220	.1254-02	.9171-03	.1970	1.414	524.3
25	315.00	.75000	885.00	.1860-01	.2250-01	.2550-01	.9220	.1298-02	.9481-03	.2030	1.292	524.7
25	315.00	.80000	886.00	.3760-01	.4570-01	.5200-01	.9220	.2649-02	.1918-02	.4010	2.540	529.8
25	315.00	.84000	887.00	.4380-01	.5340-01	.6090-01	.9220	.3106-02	.2233-02	.4580	2.899	533.5
46	315.00	.85000	888.00	.5270-01	.6510-01	.7510-01	.9220	.3826-02	.2686-02	.5270	3.327	553.0
46	315.00	.87000	890.00	.6180-01	.7660-01	.8850-01	.9220	.4510-02	.3152-02	.6110	3.870	555.0
46	315.00	.88000	891.00	.7000-01	.8700-01	.1008	.9220	.5137-02	.3568-02	.6830	4.339	557.7
46	315.00	.89000	892.00	.7230-01	.9010-01	.1044	.9220	.5325-02	.3685-02	.6990	4.517	559.3
46	315.00	.90000	893.00	.6390-01	.7970-01	.9260-01	.9220	.4722-02	.3257-02	.6130	4.008	560.7
46	315.00	.91000	894.00	.4600-01	.5720-01	.6640-01	.9220	.3383-02	.2343-02	.4450	3.226	559.1
46	315.00	.92600	895.00	.8470-01	.1085	.1287	.9220	.6563-02	.4316-02	.7370	5.272	578.3
46	322.30	.42000	897.00	.8790-01	.1094	.1268	.9220	.6465-02	.4482-02	.8540	5.456	558.5
46	322.30	.43500	898.00	.9270-01	.1156	.1340	.9220	.6832-02	.4728-02	.8970	5.570	559.3
46	322.30	.45000	899.00	.9730-01	.1216	.1412	.9220	.7201-02	.4961-02	.9320	6.054	561.1
46	322.30	.50000	900.00	.7310-01	.9020-01	.1039	.9220	.5298-02	.3725-02	.7330	4.871	552.2
46	322.30	.60000	901.00	.3850-01	.4710-01	.5380-01	.9220	.2744-02	.1961-02	.4010	2.668	544.3
48	324.45	.40500	2109.0	.7100-01	.8790-01	.1014	.9220	.5174-02	.3622-02	.7060	4.431	554.8
48	324.45	.41000	2110.0	.7210-01	.8940-01	.1032	.9220	.5266-02	.3681-02	.7150	4.487	555.5
48	324.45	.92600	2164.0	.8790-01	.1112	.1307	.9220	.6667-02	.4484-02	.8010	5.625	571.1
48	326.85	.40000	2107.0	.6660-01	.8210-01	.9440-01	.9220	.4816-02	.3399-02	.6760	4.248	551.0
48	326.85	.40500	2108.0	.6550-01	.8090-01	.9310-01	.9220	.4748-02	.3344-02	.6610	4.156	552.0
47	326.85	.44000	2021.0	.9450-01	.1193	.1398	.9220	.7128-02	.4821-02	.8700	5.472	568.5
47	326.85	.54600	2024.0	.3780-01	.4680-01	.5400-01	.9220	.2755-02	.1929-02	.3760	2.507	554.3
47	326.85	.58100	2025.0	.4130-01	.5110-01	.5890-01	.9220	.3006-02	.2109-02	.4130	2.879	553.3
47	326.85	.61600	2026.0	.2990-01	.3670-01	.4210-01	.9220	.2145-02	.1527-02	.3090	2.150	546.5
47	326.85	.65200	2027.0	.1700-01	.2080-01	.2380-01	.9220	.1212-02	.8688-03	.1790	1.249	542.7
47	326.85	.72260	2029.0	.5500-01	.6740-01	.7710-01	.9220	.3932-02	.2805-02	.5720	3.989	545.3
47	326.85	.75790	2030.0	.1730-01	.2110-01	.2410-01	.9220	.1230-02	.8824-03	.1830	1.170	542.2
47	326.85	.79310	2031.0	.3340-01	.4100-01	.4700-01	.9220	.2395-02	.1703-02	.3440	2.155	547.0
47	326.85	.82830	2032.0	.2700-01	.3320-01	.3810-01	.9220	.1944-02	.1378-02	.2760	1.746	548.4
47	326.85	.86350	2033.0	.4910-01	.6070-01	.6990-01	.9220	.3566-02	.2503-02	.4910	3.066	553.0
47	326.85	.90000	2034.0	.6660-01	.8340-01	.9720-01	.9220	.4956-02	.3398-02	.6320	3.893	563.2
48	326.85	.92600	2163.0	.1171	.1518	.1820	.9220	.9283-02	.5974-02	.9800	6.832	585.7
47	326.85	.93390	2035.0	.1504	.2001	.2455	.9220	.1252-01	.7670-02	1.157	7.555	598.2
48	330.20	.40000	2104.0	.6930-01	.8530-01	.9800-01	.9220	.5000-02	.3535-02	.7060	4.441	550.1
48	330.20	.40500	2105.0	.7530-01	.9280-01	.1067	.9220	.5443-02	.3843-02	.7640	4.808	550.8
48	330.20	.41000	2106.0	.7150-01	.8840-01	.1018	.9220	.5194-02	.3648-02	.7170	4.489	553.3
46	330.20	.42000	905.00	.7390-01	.9160-01	.1057	.9220	.5390-02	.3769-02	.7320	4.704	554.7
46	330.20	.43500	906.00	.8820-01	.1104	.1285	.9220	.6551-02	.4498-02	.8380	5.395	562.6

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
46	330.20	.45000	907.00	.1067	.1347	.1579	.9220	.8050-02	.5440-02	.9800	6.323	568.9
46	330.20	.50000	908.00	.5370-01	.6640-01	.7650-01	.9220	.3900-02	.2736-02	.5350	3.817	553.3
46	330.20	.60000	909.00	.3500-01	.4270-01	.4880-01	.9220	.2487-02	.1782-02	.3670	2.409	542.8
46	330.20	.70000	910.00	.1820-01	.2220-01	.2530-01	.9220	.1289-02	.9289-03	.1940	1.314	539.9
46	330.20	.80000	911.00	.1750-01	.2130-01	.2430-01	.9220	.1236-02	.8900-03	.1860	1.194	540.5
46	330.20	.87000	912.00	.1090-01	.1330-01	.1510-01	.9220	.7712-03	.5581-03	.1180	.7580	537.6
48	330.20	.92600	2162.0	.1325	.1739	.2106	.9220	.1074-01	.6764-02	1.068	7.401	591.8
46	334.98	.92600	2161.0	.1717	.2245	.2710	.9220	.1383-01	.8761-02	1.398	9.665	590.1
46	334.98	.93500	913.00	.1605	.2176	.2718	.9220	.1386-01	.8181-02	1.167	8.233	606.4
46	334.98	.94500	914.00	.4210-01	.5200-01	.5990-01	.9220	.3054-02	.2145-02	.4210	3.023	552.7
46	337.50	.40000-01	915.00	.2886	.3704	.3794	.9458	.1934-01	.1472-01	2.496	15.56	579.4
46	337.50	.50000-01	916.00	.2795	.3561	.3708	.9428	.1891-01	.1425-01	2.482	15.78	574.9
46	337.50	.70000-01	918.00	.1782	.2222	.2371	.9373	.1209-01	.9086-02	1.719	11.87	559.8
46	337.50	.80000-01	919.00	.1587	.1968	.2122	.9349	.1082-01	.8091-02	1.566	10.64	555.4
46	337.50	.10000+00	920.00	.1207	.1482	.1624	.9307	.8282-02	.6153-02	1.243	8.303	547.0
46	337.50	.15000	921.00	.6210-01	.7540-01	.8490-01	.9239	.4328-02	.3164-02	.6710	4.886	537.0
46	337.50	.20000	922.00	.3290-01	.3990-01	.4520-01	.9220	.2304-02	.1679-02	.3620	2.425	533.6
46	337.50	.42000	923.00	.9600-01	.1201	.1398	.9220	.7129-02	.4892-02	.9110	5.895	562.8
48	337.50	.42500	2167.0	.8120-01	.1011	.1171	.9220	.5974-02	.4143-02	.7900	5.065	559.0
46	337.50	.43500	924.00	.7040-01	.8740-01	.1011	.9220	.5153-02	.3591-02	.6930	4.510	556.2
46	337.50	.85000	926.00	.5280-01	.6470-01	.7400-01	.9220	.3774-02	.2689-02	.5470	3.538	545.7
46	337.50	.86000	927.00	.5850-01	.7180-01	.8230-01	.9220	.4195-02	.2980-02	.6010	3.898	547.3
46	337.50	.87000	928.00	.5740-01	.7050-01	.8090-01	.9220	.4123-02	.2924-02	.5880	3.820	548.1
46	337.50	.88000	929.00	.5050-01	.6140-01	.6980-01	.9220	.3561-02	.2573-02	.5420	3.559	538.4
46	337.50	.89000	930.00	.6860-01	.8500-01	.9820-01	.9220	.5006-02	.3496-02	.6770	4.438	555.3
46	337.50	.90000	931.00	.7660-01	.9550-01	.1108	.9220	.5647-02	.3907-02	.7410	4.964	559.4
46	337.50	.91000	932.00	.7230-01	.9010-01	.1045	.9220	.5326-02	.3688-02	.7000	5.095	559.1
25	343.12	.41500	934.00	.7710-01	.9540-01	.1101	.9220	.5611-02	.3932-02	.7570	4.913	546.1
25	343.12	.42000	935.00	.8840-01	.1102	.1278	.9220	.6512-02	.4508-02	.8440	5.510	551.4
25	343.12	.42500	936.00	.1342	.1718	.2039	.9220	.1039-01	.6840-02	1.153	7.476	570.1
25	343.12	.44500	939.00	.1177	.1467	.1703	.9220	.8680-02	.5998-02	1.118	7.405	552.2
25	343.12	.45000	940.00	.1045	.1294	.1492	.9220	.7606-02	.5328-02	1.025	6.808	546.3
25	343.12	.50000	941.00	.5560-01	.6780-01	.7730-01	.9220	.3940-02	.2834-02	.5810	3.971	533.4
25	343.12	.60000	942.00	.3090-01	.3740-01	.4240-01	.9220	.2162-02	.1575-02	.3340	2.176	526.5
25	343.12	.80000	944.00	.4410-01	.5350-01	.6080-01	.9220	.3097-02	.2247-02	.4710	3.103	528.9
48	345.56	.42500	2168.0	.1298	.1668	.1984	.9220	.1012-01	.6623-02	1.121	7.106	580.5
48	345.56	.92600	2160.0	.1782	.2304	.2756	.9220	.1406-01	.9091-02	1.504	10.43	584.3
25	348.00	.35000	945.00	.5100-01	.6220-01	.7090-01	.9220	.3612-02	.2601-02	.5350	3.417	532.8
25	348.00	.36000	946.00	.4670-01	.5690-01	.6480-01	.9220	.3302-02	.2379-02	.4900	3.140	532.5
25	348.00	.37000	947.00	.3990-01	.4860-01	.5530-01	.9220	.2821-02	.2036-02	.4220	2.709	531.5
46	348.00	.37500	948.00	.4460-01	.5470-01	.6270-01	.9220	.3194-02	.2276-02	.4630	2.951	545.7
46	348.00	.38000	949.00	.4460-01	.5470-01	.6270-01	.9220	.3196-02	.2273-02	.4600	2.956	546.7
46	348.00	.38500	950.00	.4510-01	.5550-01	.6360-01	.9220	.3243-02	.2301-02	.4630	2.982	547.9

IH72, OTS W/PROTUBERANCES, EXTERNAL TANK HI/HREF (RVZT24)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
46	348.00	.39000	951.00	.4770-01	.5870-01	.6750-01	.9220	.3439-02	.2432-02	.4850	3.141	549.6
46	348.00	.39500	952.00	.5440-01	.6720-01	.7750-01	.9220	.3949-02	.2774-02	.5450	3.472	552.6
46	348.00	.40000	953.00	.6040-01	.7490-01	.8640-01	.9220	.4407-02	.3079-02	.5970	3.868	555.1
46	348.00	.41000	955.00	.8670-01	.1086	.1266	.9220	.6454-02	.4420-02	.8190	5.299	563.7
46	348.00	.41500	956.00	.1020	.1289	.1511	.9220	.7705-02	.5202-02	.9360	6.054	569.1
46	348.00	.42000	957.00	.1143	.1453	.1713	.9220	.8731-02	.5828-02	1.024	6.632	573.3
46	348.00	.42500	958.00	.1028	.1301	.1528	.9220	.7791-02	.5243-02	.9370	6.076	570.3
46	348.00	.43000	959.00	.1552	.2051	.2501	.9220	.1275-01	.7912-02	1.218	7.783	595.0
46	348.00	.44000	960.00	.1791	.2370	.2895	.9220	.1476-01	.9129-02	1.398	8.956	595.8
46	348.00	.44500	961.00	.1469	.1893	.2258	.9220	.1151-01	.7488-02	1.252	8.074	581.8
46	348.00	.47000	965.00	.6240-01	.7680-01	.8830-01	.9220	.4500-02	.3183-02	.6350	4.227	549.3
46	348.00	.85000	968.00	.7000-01	.8610-01	.9890-01	.9220	.5043-02	.3567-02	.7120	4.615	549.3
46	348.00	.86000	969.00	.7910-01	.9800-01	.1132	.9220	.5771-02	.4035-02	.7830	5.075	554.8
47	348.00	.89000	972.00	.7980-01	.1009	.1184	.9220	.6039-02	.4069-02	.7290	4.786	569.9
47	348.00	.90000	973.00	.7440-01	.9450-01	.1113	.9220	.5678-02	.3797-02	.6690	4.496	572.7
47	348.00	.91000	974.00	.5730-01	.7280-01	.8570-01	.9220	.4370-02	.2925-02	.5170	3.721	572.4
47	348.00	.92600	975.00	.1805	.2457	.3080	.9220	.1571-01	.9207-02	1.300	9.136	607.9
48	352.20	.93700	2089.0	.9070-01	.1193	.1448	.9220	.7387-02	.4629-02	.7250	4.957	593.1
48	354.00	.42500	2169.0	.2540-01	.3120-01	.3570-01	.9220	.1820-02	.1298-02	.2650	1.708	545.8
48	354.00	.43000	2174.0	.1471	.1909	.2292	.9220	.1169-01	.7504-02	1.225	7.742	586.5
48	354.00	.43500	2177.0	.2031	.2722	.3364	.9220	.1716-01	.1036-01	1.529	9.593	602.2
48	354.00	.44000	2179.0	.2151	.2944	.3710	.9220	.1893-01	.1097-01	1.527	9.538	610.6
48	355.16	.92600	2158.0	.2282	.3205	.4142	.9220	.2113-01	.1164-01	1.517	10.50	619.5

EXTERNAL TANK

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
237	-.8000-01	.0000	3.010	37.00	701.0	249.2	.9920	6.294	2329.	.3341-03	.1995-06	3.900
238	-.1200	.0000	3.010	37.00	702.0	249.6	.9920	6.289	2330.	.3333-03	.1997-06	3.888
239	-.1200	.0000	3.010	36.90	703.0	249.9	.9900	6.280	2332.	.3324-03	.1999-06	3.876
240	-.1200	.0000	3.010	36.90	704.0	250.4	.9890	6.275	2334.	.3315-03	.2003-06	3.862
241	-.1200	.0000	3.010	36.90	704.0	250.4	.9890	6.274	2334.	.3314-03	.2003-06	3.861
242	-.1000+00	.0000	3.010	36.80	704.0	250.5	.9870	6.262	2334.	.3308-03	.2004-06	3.853

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
237	.5532-01	.9186-02
238	.5531-01	.9199-02
239	.5528-01	.9212-02
240	.5527-01	.9228-02
241	.5527-01	.9229-02
242	.5522-01	.9238-02

TEST DATA

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
241	.00000	.25000-01	2187.0	.5381	.7494	.6380	.9722	.3526-01	.2974-01	3.715	25.81	579.3
241	.00000	.30000-01	2188.0	.5068	.7041	.6009	.9721	.3321-01	.2801-01	3.518	24.61	578.6
240	.00000	.40000-01	600.00	.5611	.7320	.6586	.9683	.3640-01	.3101-01	4.674	29.95	553.5
240	.00000	.50000-01	601.00	.4337	.5760	.5251	.9648	.2902-01	.2397-01	3.416	21.87	561.7
240	.00000	.70000-01	603.00	.3385	.4415	.4202	.9583	.2323-01	.1871-01	2.824	19.21	553.2
240	.00000	.80000-01	604.00	.2895	.3728	.3616	.9554	.1998-01	.1600-01	2.523	16.42	546.5
240	.00000	.15000	606.00	.1537	.1926	.2022	.9406	.1118-01	.8497-02	1.483	10.87	529.7
240	.00000	.20000	607.00	.1007	.1250	.1343	.9356	.7424-02	.5567-02	1.009	6.667	522.9
240	.00000	.21000	608.00	.8220-01	.1038	.1126	.9351	.6222-02	.4543-02	.7700	5.351	534.8
240	.00000	.22000	609.00	.7060-01	.8910-01	.9680-01	.9347	.5350-02	.3903-02	.6630	4.963	534.3
240	.00000	.30000	610.00	.6310-01	.7950-01	.8650-01	.9345	.4778-02	.3490-02	.5970	4.114	533.2
240	.00000	.35000	611.00	.5670-01	.7150-01	.7780-01	.9345	.4298-02	.3136-02	.5350	3.589	533.5

IH72, OTS CLEAN, EXTERNAL TANK HI/HREF (RVZT29)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
240	.00000	.36000	612.00	.5590-01	.7050-01	.7670-01	.9345	.4240-02	.3089-02	.5250	3.550	534.3
240	.00000	.37500	614.00	.6570-01	.8340-01	.9110-01	.9345	.5034-02	.3629-02	.6000	4.046	539.0
242	.00000	.39500	618.00	.7800-01	.1006	.1105	.9345	.6103-02	.4309-02	.6760	4.557	547.4
242	.00000	.40000	619.00	.8650-01	.1126	.1243	.9345	.6862-02	.4774-02	.7240	4.836	552.7
242	.00000	.40500	620.00	.1112	.1444	.1591	.9345	.8786-02	.6138-02	.9400	6.302	551.2
242	.00000	.41000	621.00	.1332	.1750	.1938	.9345	.1070-01	.7353-02	1.084	7.248	556.9
242	.00000	.41500	622.00	.1582	.2086	.2314	.9345	.1278-01	.8737-02	1.274	8.487	558.5
242	.00000	.43000	625.00	.1699	.2228	.2466	.9345	.1362-01	.9384-02	1.392	9.315	555.9
242	.00000	.44000	626.00	.1599	.2095	.2318	.9345	.1280-01	.8828-02	1.312	8.778	555.7
242	.00000	.44500	627.00	.1643	.2154	.2383	.9345	.1316-01	.9073-02	1.347	9.097	555.8
240	.00000	.46000	630.00	.1389	.1838	.2042	.9345	.1129-01	.7675-02	1.106	7.384	560.1
240	.00000	.47000	631.00	.1291	.1713	.1907	.9345	.1054-01	.7137-02	1.020	6.807	561.3
240	.00000	.48000	632.00	.1536	.2063	.2309	.9345	.1276-01	.8489-02	1.170	7.835	566.4
240	.00000	.49000	633.00	.1629	.2149	.2386	.9345	.1318-01	.9002-02	1.309	8.880	558.8
240	.00000	.50000	634.00	.1212	.1580	.1744	.9345	.9637-02	.6700-02	1.014	7.073	552.8
240	.00000	.55000	635.00	.1028	.1325	.1456	.9345	.8047-02	.5680-02	.8910	5.913	547.4
240	.00000	.60000	636.00	.1132	.1455	.1597	.9345	.8826-02	.6256-02	.9910	6.391	545.8
240	.00000	.65000	637.00	.1129	.1450	.1590	.9345	.8786-02	.6237-02	.9920	6.418	545.2
240	.00000	.70000	638.00	.8300-01	.1060	.1160	.9345	.6413-02	.4587-02	.7430	5.097	542.2
240	.00000	.75000	639.00	.5630-01	.7130-01	.7780-01	.9345	.4299-02	.3111-02	.5190	3.362	537.4
240	.00000	.80000	640.00	.5470-01	.6950-01	.7580-01	.9345	.4190-02	.3021-02	.4990	3.141	538.9
240	.00000	.85000	641.00	.5390-01	.6850-01	.7470-01	.9345	.4129-02	.2979-02	.4930	3.129	538.7
240	.00000	.87000	643.00	.5020-01	.6380-01	.6970-01	.9345	.3854-02	.2772-02	.4560	2.948	539.8
240	.00000	.88000	644.00	.5040-01	.6420-01	.7010-01	.9345	.3877-02	.2786-02	.4570	2.980	540.3
242	.00000	.95000	649.00	.3530-01	.4420-01	.4800-01	.9345	.2649-02	.1947-02	.3390	2.492	530.3
239	5.6250	.42500	2170.0	.1436	.1924	.2151	.9345	.1189-01	.7936-02	1.099	7.084	564.3
239	5.6250	.43500	2178.0	.1424	.1893	.2108	.9345	.1165-01	.7872-02	1.116	7.211	560.9
242	11.250	.35000	650.00	.6310-01	.7990-01	.8710-01	.9345	.4810-02	.3485-02	.5840	3.943	536.8
242	11.250	.37000	652.00	.2480-01	.3130-01	.3410-01	.9345	.1882-02	.1372-02	.2330	1.579	534.2
242	11.250	.38000	654.00	.8280-01	.1066	.1171	.9345	.6465-02	.4572-02	.7200	4.855	546.8
242	11.250	.39500	657.00	.8420-01	.1084	.1190	.9345	.6571-02	.4647-02	.7320	4.937	546.7
242	11.250	.40500	659.00	.8830-01	.1150	.1269	.9345	.7007-02	.4875-02	.7390	4.981	552.7
242	11.250	.41500	661.00	.1163	.1531	.1697	.9345	.9369-02	.6424-02	.9430	6.302	557.5
242	11.250	.42000	662.00	.1254	.1666	.1856	.9345	.1025-01	.6923-02	.9840	6.585	562.1
242	11.250	.42500	663.00	.1276	.1697	.1889	.9345	.1043-01	.7048-02	1.002	6.727	562.1
242	11.250	.43000	664.00	.1253	.1659	.1844	.9345	.1018-01	.6916-02	.9950	6.740	560.5
242	11.250	.44000	665.00	.1175	.1556	.1731	.9345	.9557-02	.6485-02	.9310	6.269	560.8
242	11.250	.45000	666.00	.1182	.1563	.1736	.9345	.9585-02	.6527-02	.9440	6.360	559.7
242	11.250	.45500	667.00	.1120	.1481	.1645	.9345	.9085-02	.6184-02	.8940	6.021	559.8
242	11.250	.46000	668.00	.1106	.1457	.1616	.9345	.8923-02	.6109-02	.8940	6.045	558.0
242	11.250	.47000	669.00	.1108	.1463	.1624	.9345	.8968-02	.6115-02	.8870	6.013	559.3
242	11.250	.48000	670.00	.1172	.1562	.1741	.9345	.9614-02	.6469-02	.9120	6.173	563.3
242	11.250	.49000	671.00	.1326	.1771	.1976	.9345	.1091-01	.7323-02	1.027	6.930	564.0

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHOT DEG. R /SEC	TW DEG. R
242	11.250	.50000	672.00	.1062	.1406	.1564	.9345	.8634-02	.5863-02	.8430	5.820	560.5
242	11.250	.70000	674.00	.6940-01	.8990-01	.9890-01	.9345	.5464-02	.3834-02	.5930	4.029	549.6
242	11.250	.85000	676.00	.6270-01	.8010-01	.8750-01	.9345	.4834-02	.3465-02	.5640	3.596	541.4
242	11.250	.86000	677.00	.5920-01	.7570-01	.8280-01	.9345	.4573-02	.3268-02	.5280	3.385	542.6
242	11.250	.87000	678.00	.5460-01	.7010-01	.7680-01	.9345	.4241-02	.3014-02	.4810	3.104	544.8
242	11.250	.88000	679.00	.5160-01	.6650-01	.7300-01	.9345	.4029-02	.2850-02	.4490	2.932	546.6
242	11.250	.90000	681.00	.3400-01	.4380-01	.4810-01	.9345	.2654-02	.1875-02	.2950	1.987	547.1
242	11.250	.91000	682.00	.2290-01	.2940-01	.3220-01	.9345	.1776-02	.1266-02	.2030	1.486	543.6
242	11.250	.92600	683.00	.3720-01	.4790-01	.5270-01	.9345	.2908-02	.2053-02	.3220	2.358	547.3
242	11.250	.95000	684.00	.2500-01	.3140-01	.3420-01	.9345	.1886-02	.1379-02	.2370	1.721	532.8
242	17.000	.33000	685.00	.6680-01	.8440-01	.9200-01	.9345	.5078-02	.3686-02	.6200	4.192	536.0
242	17.000	.34000	686.00	.6670-01	.8430-01	.9180-01	.9345	.5068-02	.3683-02	.6220	4.205	535.4
242	17.000	.35000	687.00	.6380-01	.8060-01	.8770-01	.9345	.4843-02	.3522-02	.5950	4.026	535.2
239	17.000	.35500	2102.0	.6550-01	.8240-01	.8950-01	.9345	.4948-02	.3620-02	.6210	4.095	531.2
242	17.000	.36000	688.00	.6640-01	.8400-01	.9160-01	.9345	.5056-02	.3669-02	.6170	4.170	536.1
242	17.000	.37000	689.00	.7100-01	.9030-01	.9860-01	.9345	.5445-02	.3918-02	.6440	4.346	539.8
242	17.000	.37500	690.00	.7250-01	.9230-01	.1009	.9345	.5570-02	.4002-02	.6560	4.437	540.4
239	17.000	.42500	2171.0	.1190	.1552	.1714	.9345	.9476-02	.6576-02	.9890	6.322	552.3
239	17.000	.43000	2176.0	.1204	.1573	.1738	.9345	.9606-02	.6654-02	.9970	6.464	552.9
240	17.000	.50000	691.00	.1191	.1522	.1665	.9345	.9203-02	.6581-02	1.065	7.177	542.3
240	17.000	.60000	692.00	.1058	.1337	.1456	.9345	.8046-02	.5846-02	.9860	6.394	535.5
240	17.000	.70000	693.00	.7220-01	.9170-01	.1000+00	.9345	.5529-02	.3992-02	.6620	4.511	538.3
240	17.000	.80000	694.00	.5390-01	.6810-01	.7410-01	.9345	.4097-02	.2977-02	.5030	3.177	535.4
240	17.000	.92600	696.00	.3220-01	.4070-01	.4440-01	.9345	.2453-02	.1780-02	.2990	2.202	536.0
239	20.980	.35500	2098.0	.5860-01	.7320-01	.7940-01	.9345	.4386-02	.3238-02	.5690	3.820	526.9
239	20.980	.36000	2099.0	.6640-01	.8350-01	.9080-01	.9345	.5019-02	.3669-02	.6290	4.164	531.6
239	20.980	.36500	2100.0	.6660-01	.8370-01	.9100-01	.9345	.5028-02	.3679-02	.6310	4.188	531.2
239	23.070	.35500	2094.0	.6640-01	.8340-01	.9060-01	.9345	.5010-02	.3669-02	.6310	4.187	530.8
239	23.070	.36000	2095.0	.6950-01	.8750-01	.9520-01	.9345	.5262-02	.3842-02	.6560	4.347	532.1
239	23.070	.36500	2096.0	.6900-01	.8680-01	.9440-01	.9345	.5216-02	.3812-02	.6520	4.323	531.7
238	23.070	.43500	2000.0	.1172	.1522	.1677	.9345	.9275-02	.6483-02	.9900	6.342	549.2
238	23.070	.56890	2001.0	.9640-01	.1245	.1368	.9345	.7567-02	.5332-02	.8300	5.685	546.3
238	23.070	.70270	2002.0	.6910-01	.8810-01	.9630-01	.9345	.5326-02	.3822-02	.6220	4.453	539.2
238	23.070	.83500	2003.0	.5960-01	.7580-01	.8280-01	.9345	.4581-02	.3297-02	.5410	3.452	538.0
238	23.070	.90000	2004.0	.3870-01	.4920-01	.5380-01	.9345	.2974-02	.2139-02	.3500	2.365	538.2
239	23.070	.92600	2154.0	.3410-01	.4330-01	.4730-01	.9345	.2613-02	.1887-02	.3120	2.238	537.2
240	29.800	.70000-01	700.00	.3032	.3928	.3745	.9583	.2070-01	.1676-01	2.585	17.45	549.9
240	29.800	.10000+00	701.00	.2696	.3420	.3417	.9502	.1888-01	.1490-01	2.480	15.88	537.8
240	29.800	.15000	702.00	.1469	.1836	.1927	.9405	.1065-01	.8122-02	1.431	10.34	528.0
240	29.800	.20000	703.00	.8870-01	.1097	.1177	.9356	.6506-02	.4900-02	.9010	6.081	520.4
240	29.800	.30000	704.00	.5870-01	.7380-01	.8020-01	.9345	.4432-02	.3245-02	.5590	3.992	531.9
240	29.800	.35000	705.00	.7060-01	.8900-01	.9680-01	.9345	.5349-02	.3903-02	.6660	4.589	533.6
239	29.800	.35500	2090.0	.8010-01	.1010	.1099	.9345	.6074-02	.4426-02	.7500	4.974	533.2

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
239	29.800	.36500	2092.0	.6680-01	.8390-01	.9110-01	.9345	.5037-02	.3690-02	.6350	4.201	530.6
242	29.800	.50000	707.00	.1514	.2048	.2300	.9345	.1270-01	.8360-02	1.129	7.642	569.3
242	29.800	.60000	708.00	.8560-01	.1094	.1198	.9345	.6613-02	.4728-02	.7650	4.888	542.5
242	29.800	.70000	709.00	.6480-01	.8340-01	.9160-01	.9345	.5055-02	.3575-02	.5630	3.591	546.7
242	29.800	.80000	710.00	.6470-01	.8260-01	.9040-01	.9345	.4989-02	.3570-02	.5790	3.617	542.1
242	29.800	.87000	711.00	.4650-01	.5950-01	.6520-01	.9345	.3599-02	.2570-02	.4150	2.626	543.0
239	31.430	.44000	2166.0	.1185	.1556	.1723	.9345	.9523-02	.6552-02	.9670	6.392	555.2
238	31.430	.47600	2005.0	.1725	.2310	.2581	.9345	.1427-01	.9543-02	1.324	8.720	563.2
238	31.430	.51100	2006.0	.1528	.2046	.2286	.9345	.1264-01	.8453-02	1.172	7.960	563.3
238	31.430	.54600	2007.0	.7110-01	.9110-01	.9970-01	.9345	.5517-02	.3935-02	.6310	4.441	541.6
238	31.430	.61600	2009.0	.8300-01	.1056	.1153	.9345	.6379-02	.4590-02	.7530	5.174	538.0
238	31.430	.65000	2010.0	.6470-01	.8200-01	.8940-01	.9345	.4944-02	.3579-02	.5960	4.167	535.5
238	31.430	.68600	2014.0	.5660-01	.7190-01	.7860-01	.9345	.4345-02	.3128-02	.5130	3.596	537.9
238	31.430	.72050	2015.0	.3620-01	.4560-01	.4960-01	.9345	.2744-02	.2000-02	.3390	2.531	532.5
238	31.430	.79040	2017.0	.6470-01	.8250-01	.9020-01	.9345	.4987-02	.3580-02	.5830	3.701	539.0
238	31.430	.86000	2019.0	.7200-02	.9100-02	.9900-02	.9345	.5473-03	.3987-03	.6800-01	.4390	532.6
238	31.430	.89520	2020.0	.4720-01	.6030-01	.6590-01	.9345	.3646-02	.2612-02	.4230	2.764	539.9
239	31.430	.92600	2153.0	.3420-01	.4340-01	.4740-01	.9345	.2621-02	.1890-02	.3120	2.287	537.6
238	33.750	.25000	2079.0	.5260-01	.6640-01	.7220-01	.9345	.3992-02	.2911-02	.4940	4.087	532.2
238	33.750	.30000	2080.0	.6610-01	.8330-01	.9060-01	.9345	.5013-02	.3654-02	.6200	4.110	532.4
238	33.750	.37500	2081.0	.7460-01	.9400-01	.1022	.9345	.5651-02	.4125-02	.7020	4.701	531.7
238	33.750	.40000	2082.0	.7840-01	.9970-01	.1090	.9345	.6027-02	.4334-02	.7090	4.731	538.3
238	33.750	.45000	2084.0	.3330-01	.4360-01	.4830-01	.9345	.2671-02	.1842-02	.2730	1.806	553.8
238	33.750	.60000	2085.0	.1126	.1442	.1579	.9345	.8733-02	.6227-02	.9980	6.644	541.7
239	33.750	.92600	2152.0	.3150-01	.4010-01	.4370-01	.9345	.2418-02	.1742-02	.2870	2.099	538.2
238	36.320	.25000	2066.0	.1015	.1302	.1427	.9345	.7894-02	.5616-02	.8950	5.955	542.6
238	36.320	.30000	2067.0	.6390-01	.8070-01	.8780-01	.9345	.4859-02	.3537-02	.5980	3.962	533.0
238	36.320	.35000	2069.0	.7530-01	.9500-01	.1034	.9345	.5718-02	.4164-02	.7040	4.711	532.8
238	36.320	.37500	2070.0	.7600-01	.9620-01	.1048	.9345	.5795-02	.4206-02	.7050	4.714	534.3
238	36.320	.40000	2071.0	.7780-01	.9870-01	.1077	.9345	.5956-02	.4301-02	.7120	4.750	536.5
238	36.320	.42000	2072.0	.1070	.1375	.1509	.9345	.8345-02	.5920-02	.9370	6.232	543.7
238	36.320	.42500	2073.0	.1129	.1457	.1601	.9345	.8853-02	.6243-02	.9740	6.468	546.0
238	36.320	.43000	2074.0	.1147	.1480	.1627	.9345	.9000-02	.6341-02	.9870	6.555	546.3
238	36.320	.43500	2075.0	.1184	.1540	.1699	.9345	.9394-02	.6548-02	.9940	6.588	550.2
238	36.320	.45000	2076.0	.1520	.1943	.2126	.9345	.1176-01	.8407-02	1.356	9.036	540.6
238	36.320	.60000	2077.0	.9710-01	.1245	.1364	.9345	.7543-02	.5372-02	.8580	5.762	542.3
238	36.320	.65000	2078.0	.7220-01	.9190-01	.1004	.9345	.5553-02	.3993-02	.6540	4.493	538.3
242	37.700	.50000-01	715.00	.4056	.5399	.4920	.9647	.2716-01	.2239-01	3.170	20.51	562.8
242	37.700	.70000-01	716.00	.3270	.4272	.4067	.9582	.2245-01	.1805-01	2.708	18.41	554.3
242	37.700	.10000+00	717.00	.2333	.2977	.2975	.9501	.1643-01	.1288-01	2.096	13.63	541.6
242	37.700	.15000	718.00	.1426	.1796	.1889	.9405	.1043-01	.7874-02	1.345	9.911	533.5
242	37.700	.20000	719.00	.8390-01	.1044	.1123	.9356	.6201-02	.4635-02	.8330	5.683	524.5
242	37.700	.30000	720.00	.6030-01	.7670-01	.8380-01	.9345	.4627-02	.3331-02	.5490	3.941	539.5

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
240	37.700	.35000	721.00	.7400-01	.9280-01	.1008	.9345	.5572-02	.4089-02	.7090	4.952	530.9
240	37.700	.50000	723.00	.1866	.2413	.2655	.9345	.1467-01	.1031-01	1.600	11.04	549.0
240	37.700	.60000	724.00	.1040	.1318	.1438	.9345	.7945-02	.5748-02	.9590	6.160	537.4
240	37.700	.70000	725.00	.5750-01	.7290-01	.7950-01	.9345	.4395-02	.3178-02	.5290	3.379	537.6
240	37.700	.80000	726.00	.5800-01	.7360-01	.8030-01	.9345	.4438-02	.3207-02	.5330	3.365	538.0
240	37.700	.87000	727.00	.5170-01	.6600-01	.7220-01	.9345	.3992-02	.2859-02	.4650	2.980	541.6
240	37.700	.92600	728.00	.3030-01	.3880-01	.4240-01	.9345	.2344-02	.1677-02	.2720	1.982	542.0
241	39.000	.10000-01	993.00	.6192	.9149	.7488	.9732	.4138-01	.3422-01	3.729	26.46	595.3
238	45.000	.25000	2036.0	.4860-01	.6130-01	.6670-01	.9345	.3689-02	.2690-02	.4570	3.721	532.2
238	45.000	.30000	2037.0	.2000-03	.3000-03	.3000-03	.9345	.1608-04	.1177-04	.2000-02	.1400-01	530.7
238	45.000	.32500	2038.0	.7910-01	.1003	.1094	.9345	.6050-02	.4372-02	.7250	4.987	536.2
238	45.000	.35000	2039.0	.9150-01	.1162	.1269	.9345	.7019-02	.5058-02	.8320	5.639	537.4
238	45.000	.37500	2040.0	.9080-01	.1154	.1260	.9345	.6969-02	.5022-02	.8260	5.598	537.4
238	45.000	.40000	2041.0	.1198	.1549	.1704	.9345	.9423-02	.6625-02	1.026	6.916	547.1
238	45.000	.43000	2044.0	.1224	.1582	.1740	.9345	.9622-02	.6769-02	1.050	7.077	546.9
238	45.000	.44000	2046.0	.1151	.1480	.1624	.9345	.8982-02	.6364-02	1.004	6.774	544.3
238	45.000	.45000	2047.0	.1180	.1519	.1667	.9345	.9222-02	.6527-02	1.027	6.972	544.6
238	45.000	.47000	2048.0	.1234	.1606	.1772	.9345	.9800-02	.6825-02	1.034	7.065	550.5
238	45.000	.55000	2049.0	.1013	.1316	.1449	.9345	.8017-02	.5604-02	.8560	5.873	549.2
238	45.000	.60000	2050.0	.1075	.1391	.1530	.9345	.8464-02	.5948-02	.9200	6.198	547.3
238	45.000	.65000	2051.0	.8230-01	.1055	.1156	.9345	.6394-02	.4551-02	.7260	4.847	542.4
238	45.000	.75000	2052.0	.4830-01	.6140-01	.6700-01	.9345	.3706-02	.2673-02	.4410	2.818	537.0
238	45.000	.80000	2053.0	.7040-01	.8960-01	.9790-01	.9345	.5414-02	.3891-02	.6360	4.016	538.4
238	45.000	.83000	2054.0	.6660-01	.8520-01	.9330-01	.9345	.5159-02	.3685-02	.5930	3.729	541.0
238	45.000	.84000	2055.0	.6750-01	.8620-01	.9430-01	.9345	.5217-02	.3735-02	.6040	3.800	540.1
238	45.000	.85000	2056.0	.6430-01	.8210-01	.8990-01	.9345	.4970-02	.3557-02	.5750	3.670	540.2
238	45.000	.86000	2057.0	.6340-01	.8100-01	.8860-01	.9345	.4898-02	.3509-02	.5690	3.713	539.9
238	45.000	.87000	2058.0	.6180-01	.7890-01	.8640-01	.9345	.4778-02	.3415-02	.5510	3.678	540.8
238	45.000	.88000	2059.0	.6300-01	.8090-01	.8880-01	.9345	.4912-02	.3483-02	.5500	3.672	543.9
238	45.000	.89000	2060.0	.6040-01	.7770-01	.8530-01	.9345	.4719-02	.3343-02	.5270	3.527	544.3
238	45.000	.90000	2061.0	.3750-01	.4780-01	.5220-01	.9345	.2888-02	.2076-02	.3400	2.285	538.4
238	45.000	.91000	2062.0	.4730-01	.5970-01	.6490-01	.9345	.3591-02	.2618-02	.4450	3.663	532.2
238	45.000	.92600	2063.0	.2900-01	.3710-01	.4070-01	.9345	.2250-02	.1604-02	.2570	1.821	541.7
238	45.000	.93500	2064.0	.4880-01	.6280-01	.6900-01	.9345	.3815-02	.2697-02	.4230	3.161	545.1
238	45.000	.94500	2065.0	.3930-01	.4960-01	.5390-01	.9345	.2982-02	.2173-02	.3680	2.465	532.4
240	180.00	.15000-01	2182.0	.5414	.8665	.6798	.9729	.3757-01	.2992-01	2.808	20.45	610.3
240	180.00	.20000-01	2183.0	.5387	.7714	.6491	.9718	.3587-01	.2978-01	3.476	25.86	587.5
240	180.00	.25000-01	2184.0	.2779	.3449	.3120	.9718	.1725-01	.1536-01	2.782	20.54	523.1
240	180.00	.40000-01	737.00	.1877	.2302	.2130	.9679	.1177-01	.1038-01	1.979	13.13	513.5
240	180.00	.45000-01	738.00	.4518	.6014	.5434	.9661	.3003-01	.2497-01	3.535	23.22	562.6
240	180.00	.60000-01	739.00	.3778	.4966	.4643	.9611	.2566-01	.2088-01	3.074	20.55	557.0
240	180.00	.70000-01	740.00	.3256	.4271	.4069	.9580	.2249-01	.1800-01	2.667	17.95	556.0
240	180.00	.80000-01	741.00	.2855	.3719	.3609	.9551	.1994-01	.1578-01	2.391	17.33	552.7

IH72, OTS CLEAN, EXTERNAL TANK HI/HREF (RVZT29)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
240	180.00	.10000+00	742.00	.2464	.3174	.3176	.9499	.1755-01	.1362-01	2.143	14.32	546.8
240	180.00	.12500	743.00	.1931	.2483	.2564	.9445	.1417-01	.1068-01	1.692	12.30	545.7
240	180.00	.15000	744.00	.1591	.2036	.2152	.9404	.1189-01	.8793-02	1.416	9.862	543.2
240	180.00	.17500	745.00	.1109	.1406	.1508	.9374	.8335-02	.6129-02	1.021	7.711	537.6
240	180.00	.20000	746.00	.8510-01	.1073	.1161	.9355	.6416-02	.4702-02	.8000	5.758	534.1
240	180.00	.21500	747.00	.7270-01	.9330-01	.1021	.9349	.5644-02	.4019-02	.6400	4.442	544.9
240	180.00	.23000	748.00	.5690-01	.7300-01	.8000-01	.9345	.4420-02	.3143-02	.5010	3.710	544.6
240	180.00	.24000	749.00	.5180-01	.6680-01	.7340-01	.9345	.4058-02	.2862-02	.4480	3.377	547.7
240	180.00	.25000	750.00	.2530-01	.3210-01	.3510-01	.9345	.1939-02	.1397-02	.2300	1.870	539.3
240	180.00	.30000	751.00	.5710-01	.7310-01	.8010-01	.9345	.4425-02	.3154-02	.5070	3.330	543.6
240	180.00	.35000	752.00	.6170-01	.7840-01	.8560-01	.9345	.4733-02	.3411-02	.5630	3.574	539.1
240	180.00	.40000	753.00	.7820-01	.9950-01	.1087	.9345	.6007-02	.4324-02	.7120	4.597	539.5
240	180.00	.50000	754.00	.6670-01	.8410-01	.9150-01	.9345	.5058-02	.3688-02	.6280	4.134	534.0
240	180.00	.60000	755.00	.6580-01	.8370-01	.9150-01	.9345	.5055-02	.3635-02	.5960	3.837	540.1
240	180.00	.70000	756.00	.6010-01	.7590-01	.8260-01	.9345	.4567-02	.3324-02	.5630	3.741	534.7
240	180.00	.80000	757.00	.4610-01	.5810-01	.6330-01	.9345	.3496-02	.2550-02	.4340	2.741	533.8
240	180.00	.90000	758.00	.3710-01	.4720-01	.5150-01	.9345	.2848-02	.2049-02	.3370	2.187	539.8
240	235.00	.22000	759.00	.6670-01	.8540-01	.9330-01	.9347	.5157-02	.3688-02	.5950	4.437	542.8
240	235.00	.25000	760.00	.3210-01	.4050-01	.4400-01	.9345	.2434-02	.1772-02	.3010	2.370	534.5
240	235.00	.30000	762.00	.6670-01	.8490-01	.9270-01	.9345	.5125-02	.3687-02	.6060	3.659	539.7
240	235.00	.32000	763.00	.7500-01	.9580-01	.1048	.9345	.5794-02	.4146-02	.6730	3.990	541.9
240	235.00	.34000	764.00	.1004	.1290	.1415	.9345	.7822-02	.5551-02	.8820	5.235	545.3
240	235.00	.36000	765.00	.1033	.1344	.1483	.9345	.8198-02	.5708-02	.8670	5.196	552.3
240	235.00	.38000	766.00	.1152	.1510	.1670	.9345	.9229-02	.6369-02	.9480	5.738	555.3
242	247.00	.23000	768.00	.6190-01	.7950-01	.8720-01	.9345	.4815-02	.3420-02	.5440	4.050	545.2
242	247.00	.25000	769.00	.3410-01	.4370-01	.4780-01	.9345	.2640-02	.1883-02	.3030	2.360	543.5
242	247.00	.27000	770.00	.3540-01	.4570-01	.5020-01	.9345	.2771-02	.1952-02	.3050	2.221	548.2
242	247.00	.30000	772.00	.8540-01	.1111	.1225	.9345	.6763-02	.4714-02	.7180	4.376	552.0
242	247.00	.31000	773.00	.9530-01	.1244	.1374	.9345	.7588-02	.5263-02	.7920	4.786	553.8
242	247.00	.32000	774.00	.1074	.1427	.1588	.9345	.8771-02	.5931-02	.8450	5.042	561.8
242	247.00	.32500	775.00	.1114	.1497	.1675	.9345	.9250-02	.6150-02	.8460	5.053	566.7
242	247.00	.33000	776.00	.1332	.1809	.2035	.9345	.1124-01	.7355-02	.9820	5.869	570.7
242	247.00	.33500	777.00	.1526	.2101	.2379	.9345	.1314-01	.8425-02	1.084	6.457	575.7
242	247.00	.34000	778.00	.1618	.2224	.2516	.9345	.1389-01	.8936-02	1.156	6.888	575.0
242	247.00	.34500	779.00	.1624	.2220	.2505	.9345	.1383-01	.8966-02	1.176	7.037	573.1
242	247.00	.35000	780.00	.1458	.1942	.2166	.9345	.1196-01	.8049-02	1.136	6.846	563.2
240	247.00	.36000	782.00	.1284	.1682	.1860	.9345	.1028-01	.7097-02	1.057	6.416	555.2
240	247.00	.36500	783.00	.1165	.1511	.1664	.9345	.9196-02	.6437-02	.9900	6.004	550.5
240	247.00	.37000	784.00	.1057	.1363	.1497	.9345	.8275-02	.5842-02	.9170	5.600	547.3
240	247.00	.38000	786.00	.9710-01	.1250	.1373	.9345	.7586-02	.5366-02	.8460	5.228	546.6
240	247.00	.39000	787.00	.9220-01	.1183	.1297	.9345	.7167-02	.5096-02	.8140	5.047	544.5
240	247.00	.40000	788.00	.8790-01	.1125	.1233	.9345	.6813-02	.4858-02	.7810	4.887	543.5
241	247.00	.50000	789.00	.6010-01	.7420-01	.8010-01	.9345	.4428-02	.3319-02	.6120	3.975	520.0

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
241	247.00	.60000	790.00	.6740-01	.8660-01	.9500-01	.9345	.5249-02	.3722-02	.5900	3.877	545.6
241	247.00	.70000	791.00	.6200-01	.8030-01	.8830-01	.9345	.4882-02	.3428-02	.5310	3.744	549.4
239	247.00	.90000	793.00	.3600-01	.4660-01	.5120-01	.9345	.2832-02	.1990-02	.3090	1.988	549.1
239	247.00	.92600	2144.0	.2440-01	.3140-01	.3450-01	.9345	.1908-02	.1350-02	.2120	1.486	545.5
239	247.00	.93000	2149.0	.3510-01	.4540-01	.4990-01	.9345	.2760-02	.1941-02	.3010	2.175	547.6
239	250.57	.92600	2143.0	.2980-01	.3840-01	.4220-01	.9345	.2332-02	.1648-02	.2590	1.810	545.8
239	250.57	.93000	2148.0	.4410-01	.5720-01	.6300-01	.9345	.3480-02	.2438-02	.3750	2.644	549.0
239	250.57	.93700	2087.0	.5110-01	.6510-01	.7110-01	.9345	.3928-02	.2827-02	.4640	3.324	538.5
241	258.00	.27000	794.00	.3490-01	.4420-01	.4820-01	.9345	.2665-02	.1930-02	.3230	2.313	537.0
241	258.00	.29000	795.00	.7360-01	.9510-01	.1046	.9345	.5783-02	.4067-02	.6320	3.893	548.8
237	258.00	.32000	798.00	.1874	.2620	.2989	.9345	.1654-01	.1037-01	1.276	7.574	577.8
237	258.00	.34000	802.00	.2135	.2934	.3319	.9345	.1836-01	.1181-01	1.519	9.068	572.2
237	258.00	.34500	803.00	.1880	.2508	.2798	.9345	.1548-01	.1040-01	1.456	8.764	560.9
237	258.00	.35500	805.00	.1290	.1673	.1843	.9345	.1019-01	.7138-02	1.093	6.622	547.8
237	258.00	.36000	806.00	.1140	.1478	.1628	.9345	.9005-02	.6307-02	.9660	5.872	547.7
237	258.00	.36500	807.00	.1074	.1395	.1538	.9345	.8508-02	.5942-02	.9040	5.506	548.7
237	258.00	.37000	808.00	.1038	.1343	.1478	.9345	.8175-02	.5739-02	.8840	5.405	546.8
237	258.00	.37500	809.00	.9480-01	.1220	.1339	.9345	.7404-02	.5244-02	.8250	5.050	543.6
237	258.00	.38000	810.00	.8430-01	.1078	.1181	.9345	.6531-02	.4661-02	.7470	4.606	540.6
241	258.00	.40000	812.00	.6550-01	.8310-01	.9060-01	.9345	.5005-02	.3621-02	.6040	3.740	537.4
239	258.00	.93500	2151.0	.5300-01	.6870-01	.7560-01	.9345	.4179-02	.2931-02	.4520	3.186	548.7
241	270.00	.40000-01	985.00	.4107	.5390	.4843	.9681	.2676-01	.2270-01	3.359	21.74	556.3
241	270.00	.50000-01	986.00	.4173	.5458	.5009	.9646	.2768-01	.2306-01	3.448	22.21	554.7
241	270.00	.60000-01	987.00	.3946	.5093	.4780	.9613	.2642-01	.2181-01	3.412	22.44	547.8
241	270.00	.70000-01	988.00	.3500	.4511	.4309	.9581	.2381-01	.1935-01	3.040	20.43	547.1
241	270.00	.80000-01	989.00	.2894	.3706	.3600	.9552	.1990-01	.1599-01	2.571	18.24	543.5
241	270.00	.10000+00	990.00	.2455	.3097	.3096	.9500	.1711-01	.1357-01	2.304	15.13	534.4
241	270.00	.15000	991.00	.1480	.1859	.1955	.9405	.1080-01	.8179-02	1.411	10.44	531.7
241	270.00	.20000	992.00	.9440-01	.1172	.1260	.9355	.6966-02	.5214-02	.9420	6.442	523.7
241	270.00	.23000	813.00	.6520-01	.8260-01	.9010-01	.9346	.4977-02	.3603-02	.6010	4.392	537.3
241	270.00	.24000	814.00	.5380-01	.6840-01	.7470-01	.9345	.4128-02	.2975-02	.4910	3.988	539.1
241	270.00	.25000	815.00	.3430-01	.4310-01	.4690-01	.9345	.2590-02	.1896-02	.3260	2.592	532.2
241	270.00	.27000	816.00	.3010-01	.3800-01	.4130-01	.9345	.2284-02	.1663-02	.2820	2.020	534.4
241	270.00	.29000	817.00	.1814	.2409	.2682	.9345	.1482-01	.1002-01	1.429	8.815	561.7
241	270.00	.30000	818.00	.2463	.3321	.3722	.9345	.2057-01	.1361-01	1.855	11.22	567.9
241	270.00	.31000	819.00	.2465	.3339	.3752	.9345	.2074-01	.1362-01	1.831	10.97	569.8
241	270.00	.32000	820.00	.2692	.3658	.4116	.9345	.2275-01	.1488-01	1.984	11.85	570.9
241	270.00	.32500	821.00	.3535	.4933	.5623	.9345	.3107-01	.1954-01	2.427	14.39	580.0
241	270.00	.33000	822.00	.3701	.5248	.6029	.9345	.3332-01	.2046-01	2.444	14.50	584.7
241	270.00	.33500	823.00	.3309	.4582	.5202	.9345	.2875-01	.1829-01	2.319	13.84	577.4
241	270.00	.34500	825.00	.2105	.2684	.2934	.9345	.1622-01	.1163-01	1.898	11.51	541.1
241	270.00	.35000	826.00	.4930-01	.5290-01	.5410-01	.9345	.2991-02	.2724-02	1.406	10.38	187.9
241	270.00	.36000	828.00	.1645	.2115	.2321	.9345	.1283-01	.9091-02	1.439	8.682	545.9

IH72, OTS CLEAN, EXTERNAL TANK HI/HREF (RVZT29)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
241	270.00	.37000	830.00	.1840-01	.2320-01	.2530-01	.9345	.1397-02	.1017-02	.1730	1.054	534.4
241	270.00	.37500	831.00	.9710-01	.1237	.1352	.9345	.7469-02	.5369-02	.8800	5.385	540.2
241	270.00	.38000	832.00	.1006	.1282	.1401	.9345	.7744-02	.5561-02	.9100	5.562	540.6
241	270.00	.39000	833.00	.8230-01	.1044	.1140	.9345	.6298-02	.4546-02	.7540	4.667	538.4
241	270.00	.50000	835.00	.4380-01	.5540-01	.6030-01	.9345	.3332-02	.2422-02	.4090	2.599	535.4
241	270.00	.60000	836.00	.6480-01	.8330-01	.9130-01	.9345	.5048-02	.3581-02	.5680	3.786	545.6
241	270.00	.70000	837.00	.9390-01	.1220	.1345	.9345	.7433-02	.5188-02	.7920	5.566	551.5
241	270.00	.80000	838.00	.8570-01	.1100	.1205	.9345	.6661-02	.4739-02	.7570	4.712	544.4
241	270.00	.90000	839.00	.5510-01	.7080-01	.7760-01	.9345	.4289-02	.3044-02	.4840	3.095	545.3
239	270.00	.92600	2141.0	.4420-01	.5690-01	.6240-01	.9345	.3448-02	.2445-02	.3870	2.652	544.5
239	270.00	.93000	2146.0	.5550-01	.7180-01	.7890-01	.9345	.4363-02	.3070-02	.4770	3.367	547.4
239	270.00	.93500	2150.0	.6040-01	.7770-01	.8540-01	.9345	.4719-02	.3337-02	.5250	3.709	545.5
239	289.43	.92600	2140.0	.4610-01	.5900-01	.6460-01	.9345	.3572-02	.2547-02	.4090	2.865	542.3
239	289.43	.93000	2145.0	.5500-01	.7080-01	.7780-01	.9345	.4298-02	.3039-02	.4770	3.406	545.6
241	292.50	.23000	840.00	.5830-01	.7380-01	.8040-01	.9346	.4444-02	.3221-02	.5400	4.372	536.7
241	292.50	.25000	841.00	.3470-01	.4360-01	.4730-01	.9345	.2614-02	.1919-02	.3330	2.602	530.8
241	292.50	.35000	845.00	.1778	.2326	.2572	.9345	.1422-01	.9828-02	1.469	8.964	554.8
241	292.50	.37000	846.00	.1182	.1495	.1629	.9345	.9004-02	.6532-02	1.098	6.801	536.2
241	292.50	.40000	847.00	.8250-01	.1032	.1118	.9345	.6180-02	.4561-02	.8030	5.054	528.1
241	292.50	.45000	848.00	.5480-01	.6830-01	.7390-01	.9345	.4085-02	.3031-02	.5420	3.444	525.4
241	292.50	.60000	851.00	.1100	.1434	.1583	.9345	.8749-02	.6081-02	.9200	6.142	553.0
241	292.50	.65000	852.00	.1464	.1926	.2135	.9345	.1180-01	.8090-02	1.187	8.030	557.5
241	292.50	.70000	853.00	.1401	.1850	.2054	.9345	.1135-01	.7743-02	1.124	7.838	559.1
241	292.50	.75000	854.00	.1105	.1427	.1569	.9345	.8672-02	.6104-02	.9510	6.164	548.4
241	292.50	.80000	855.00	.1127	.1444	.1581	.9345	.8739-02	.6228-02	1.000	6.515	543.7
239	292.50	.82000	2129.0	.1073	.1376	.1508	.9345	.8333-02	.5933-02	.9480	5.824	542.9
239	292.50	.83000	2130.0	.1053	.1353	.1484	.9345	.8201-02	.5821-02	.9230	5.713	544.1
239	292.50	.85000	2132.0	.1003	.1289	.1414	.9345	.7816-02	.5546-02	.8790	5.468	544.3
239	292.50	.86000	2133.0	.9660-01	.1241	.1361	.9345	.7523-02	.5338-02	.8460	5.233	544.3
239	292.50	.87000	2134.0	.9160-01	.1177	.1291	.9345	.7136-02	.5063-02	.8020	4.990	544.3
239	292.50	.88000	2135.0	.9280-01	.1193	.1309	.9345	.7234-02	.5128-02	.8110	5.046	544.6
239	292.50	.89000	2136.0	.8610-01	.1105	.1212	.9345	.6700-02	.4759-02	.7560	4.717	543.9
241	292.50	.90000	856.00	.6330-01	.8080-01	.8830-01	.9345	.4882-02	.3500-02	.5700	3.709	541.3
239	292.50	.92600	2138.0	.4560-01	.5840-01	.6400-01	.9345	.3536-02	.2522-02	.4050	2.840	542.2
239	292.50	.93000	2139.0	.4940-01	.6350-01	.6970-01	.9345	.3855-02	.2731-02	.4310	3.096	544.9
239	301.50	.82000	2116.0	.9240-01	.1185	.1298	.9345	.7177-02	.5109-02	.8160	5.011	543.0
239	301.50	.83000	2117.0	.9490-01	.1215	.1330	.9345	.7354-02	.5248-02	.8430	5.153	542.0
239	301.50	.83500	2118.0	.9440-01	.1209	.1325	.9345	.7323-02	.5218-02	.8360	5.063	542.6
239	301.50	.84000	2119.0	.9100-01	.1164	.1274	.9345	.7044-02	.5027-02	.8080	4.939	541.9
239	301.50	.85000	2120.0	.8930-01	.1143	.1251	.9345	.6917-02	.4938-02	.7950	4.869	541.8
239	301.50	.86000	2021.0	.9330-01	.1195	.1308	.9345	.7232-02	.5157-02	.8270	5.097	542.3
239	301.50	.87000	2122.0	.8890-01	.1140	.1250	.9345	.6907-02	.4915-02	.7840	4.815	543.2
239	301.50	.88000	2123.0	.8510-01	.1091	.1196	.9345	.6611-02	.4702-02	.7490	4.626	543.1

IH72. OTS CLEAN. EXTERNAL TANK HI/HREF

(RVZT29)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
239	301.50	.89000	2124.0	.8380-01	.1074	.1176	.9345	.6502-02	.4630-02	.7400	4.608	542.9
239	301.50	.90000	2125.0	.6510-01	.8310-01	.9090-01	.9345	.5026-02	.3597-02	.5820	3.661	540.8
239	301.50	.92600	2127.0	.5540-01	.7100-01	.7790-01	.9345	.4303-02	.3062-02	.4890	3.068	543.1
239	301.50	.93500	2128.0	.5670-01	.7270-01	.7970-01	.9345	.4406-02	.3133-02	.4990	3.370	543.4
239	305.40	.83000	2114.0	.8770-01	.1120	.1225	.9345	.6772-02	.4848-02	.7860	4.804	540.7
239	305.40	.83500	2115.0	.8500-01	.1087	.1190	.9345	.6576-02	.4699-02	.7580	4.670	541.5
241	305.40	.84000	857.00	.8100-01	.1035	.1133	.9345	.6261-02	.4479-02	.7260	4.495	542.2
237	305.40	.85000	858.00	.8280-01	.1059	.1159	.9345	.6410-02	.4582-02	.7380	4.601	539.9
237	305.40	.86000	859.00	.8120-01	.1039	.1137	.9345	.6289-02	.4493-02	.7220	4.541	540 1
237	305.40	.87000	860.00	.8030-01	.1029	.1128	.9345	.6238-02	.4442-02	.7080	4.462	541.5
237	305.40	.88000	861.00	.7930-01	.1015	.1112	.9345	.6152-02	.4385-02	.7010	4.416	541.1
237	305.40	.89000	862.00	.8040-01	.1030	.1128	.9345	.6241-02	.4447-02	.7100	4.503	541.2
237	305.40	.90000	863.00	.7300-01	.9320-01	.1019	.9345	.5638-02	.4036-02	.6520	4.163	539.2
237	305.40	.91000	864.00	.4220-01	.5330-01	.5810-01	.9345	.3213-02	.2335-02	.3930	2.874	532.8
237	305.40	.92600	865.00	.4030-01	.5160-01	.5650-01	.9345	.3123-02	.2230-02	.3580	2.604	540.3
237	309.30	.80000	866.00	.6890-01	.8790-01	.9620-01	.9345	.5319-02	.3811-02	.6170	3.892	539.0
237	309.30	.81000	867.00	.7220-01	.9240-01	.1012	.9345	.5598-02	.3992-02	.6390	4.005	540.8
237	309.30	.83000	869.00	.5680-01	.7240-01	.7910-01	.9345	.4374-02	.3144-02	.5130	3.230	537.7
237	315.00	.50000-01	871.00	.4327	.5721	.5227	.9647	.2891-01	.2394-01	3.443	21.90	557.0
237	315.00	.60000-01	872.00	.3732	.4892	.4570	.9613	.2528-01	.2064-01	3.050	20.19	553.1
241	315.00	.15000	876.00	.1489	.1882	.1981	.9405	.1095-01	.8230-02	1.388	10.21	535.6
241	315.00	.35000	878.00	.9320-01	.1179	.1285	.9345	.7103-02	.5150-02	.8640	5.396	536.5
241	315.00	.55000	881.00	.1250	.1643	.1820	.9345	.1006-01	.6907-02	1.017	6.737	557.0
241	315.00	.60000	882.00	.1150	.1496	.1650	.9345	.9120-02	.6356-02	.9670	6.484	552.0
241	315.00	.65000	883.00	.8160-01	.1052	.1155	.9345	.6385-02	.4507-02	.7070	4.821	547.4
241	315.00	.70000	884.00	.6900-01	.8850-01	.9700-01	.9345	.5363-02	.3815-02	.6100	4.339	544.4
241	315.00	.75000	885.00	.4770-01	.6070-01	.6630-01	.9345	.3665-02	.2636-02	.4330	2.738	540.0
241	315.00	.80000	886.00	.6080-01	.7730-01	.8440-01	.9345	.4667-02	.3361-02	.5540	3.496	539.3
241	315.00	.84000	887.00	.6000-01	.7630-01	.8330-01	.9345	.4602-02	.3317-02	.5480	3.458	539.0
237	315.00	.85000	888.00	.5770-01	.7340-01	.8030-01	.9345	.4439-02	.3189-02	.5200	3.311	537.9
237	315.00	.87000	890.00	.6300-01	.8030-01	.8780-01	.9345	.4857-02	.3483-02	.5650	3.609	538.5
237	315.00	.88000	891.00	.6280-01	.8030-01	.8790-01	.9345	.4863-02	.3476-02	.5600	3.590	539.9
237	315.00	.89000	892.00	.6380-01	.8150-01	.8920-01	.9345	.4934-02	.3531-02	.5700	3.721	539.5
237	315.00	.90000	893.00	.4980-01	.6340-01	.6930-01	.9345	.3835-02	.2756-02	.4490	2.972	537.8
237	315.00	.91000	894.00	.2450-01	.3080-01	.3350-01	.9345	.1854-02	.1354-02	.2300	1.694	530.8
237	315.00	.92600	895.00	.2820-01	.3620-01	.3960-01	.9345	.2190-02	.1563-02	.2500	1.826	540.7
237	322.30	.42000	897.00	.1175	.1508	.1654	.9345	.9151-02	.6498-02	1.029	6.630	542.5
237	322.30	.43500	898.00	.1433	.1857	.2044	.9345	.1131-01	.7926-02	1.216	7.597	547.5
237	322.30	.45000	899.00	.1408	.1852	.2053	.9345	.1135-01	.7790-02	1.139	7.424	554.7
237	322.30	.50000	900.00	.1921	.2569	.2870	.9345	.1587-01	.1062-01	1.475	9.748	562.1
237	322.30	.60000	901.00	.1081	.1397	.1536	.9345	.8499-02	.5978-02	.9250	6.147	546.1
237	322.30	.70000	902.00	.5240-01	.6660-01	.7280-01	.9345	.4025-02	.2897-02	.4740	3.253	537.1
239	324.45	.41000	2110.0	.9620-01	.1233	.1350	.9345	.7463-02	.5319-02	.8520	5.383	542.5

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
239	324.45	.92600	2164.0	.3510-01	.4470-01	.4890-01	.9345	.2703-02	.1940-02	.3160	2.256	539.7
239	326.85	.40000	2107.0	.1000-03	.1000-03	.1000-03	.9345	.4381-05	.3222-05	.1000-02	.4000-02	528.8
239	326.85	.40500	2108.0	.8720-01	.1112	.1215	.9345	.6717-02	.4821-02	.7860	4.971	539.7
238	326.85	.44000	2021.0	.1292	.1689	.1867	.9345	.1032-01	.7148-02	1.068	6.771	552.5
238	326.85	.54600	2024.0	.6250-01	.8020-01	.8790-01	.9345	.4860-02	.3458-02	.5510	3.699	542.6
238	326.85	.58100	2025.0	.1169	.1524	.1683	.9345	.9310-02	.6464-02	.9720	6.786	551.6
238	326.85	.61600	2026.0	.8780-01	.1130	.1241	.9345	.6863-02	.4855-02	.7630	5.311	544.8
238	326.85	.65200	2027.0	.6700-01	.8580-01	.9390-01	.9345	.5194-02	.3704-02	.5940	4.139	541.7
238	326.85	.68600	2028.0	.5690-01	.7280-01	.7970-01	.9345	.4409-02	.3145-02	.5040	3.548	541.6
238	326.85	.72260	2029.0	.3720-01	.4720-01	.5150-01	.9345	.2846-02	.2058-02	.3420	2.396	535.9
238	326.85	.75790	2030.0	.2650-01	.3330-01	.3630-01	.9345	.2007-02	.1463-02	.2480	1.599	532.3
238	326.85	.79310	2031.0	.6440-01	.8230-01	.9010-01	.9345	.4983-02	.3563-02	.5750	3.612	540.7
238	326.85	.82830	2032.0	.5270-01	.6720-01	.7350-01	.9345	.4064-02	.2914-02	.4730	3.003	539.5
238	326.85	.86350	2033.0	.4440-01	.5650-01	.6180-01	.9345	.3416-02	.2453-02	.4000	2.519	538.8
238	326.85	.90000	2034.0	.5260-01	.6730-01	.7360-01	.9345	.4071-02	.2911-02	.4690	2.927	540.7
239	326.85	.92600	2163.0	.3490-01	.4450-01	.4870-01	.9345	.2690-02	.1930-02	.3150	2.244	539.8
238	326.85	.93390	2035.0	.4350-01	.5610-01	.6160-01	.9345	.3405-02	.2406-02	.3770	2.528	545.3
239	330.20	.40000	2104.0	.9190-01	.1173	.1284	.9345	.7095-02	.5078-02	.8220	5.198	540.8
239	330.20	.40500	2105.0	.9620-01	.1230	.1346	.9345	.7442-02	.5316-02	.8570	5.414	541.6
239	330.20	.41000	2106.0	.9530-01	.1225	.1343	.9345	.7424-02	.5269-02	.8350	5.256	544.2
237	330.20	.42000	905.00	.9870-01	.1264	.1384	.9345	.7656-02	.5460-02	.8740	5.652	540.8
237	330.20	.43500	906.00	.1263	.1646	.1817	.9345	.1005-01	.6985-02	1.052	6.810	550.3
237	330.20	.45000	907.00	.1586	.2099	.2333	.9345	.1290-01	.8774-02	1.258	8.165	557.5
237	330.20	.50000	908.00	.1465	.1944	.2164	.9345	.1197-01	.8102-02	1.151	8.184	558.8
237	330.20	.60000	909.00	.9700-01	.1240	.1358	.9345	.7511-02	.5366-02	.8630	5.663	540.1
237	330.20	.70000	910.00	.6510-01	.8300-01	.9070-01	.9345	.5016-02	.3602-02	.5870	3.972	538.0
237	330.20	.80000	911.00	.5360-01	.6820-01	.7450-01	.9345	.4121-02	.2968-02	.4870	3.137	536.8
237	330.20	.87000	912.00	.5000-02	.6300-02	.6900-02	.9345	.3796-03	.2783-03	.4800-01	.3090	528.9
239	330.20	.92600	2162.0	.3370-01	.4290-01	.4680-01	.9345	.2590-02	.1864-02	.3060	2.178	538.5
239	334.98	.92600	2161.0	.3520-01	.4470-01	.4880-01	.9345	.2699-02	.1946-02	.3210	2.276	537.8
237	334.98	.93500	913.00	.2870-01	.3580-01	.3870-01	.9345	.2144-02	.1585-02	.2790	2.054	524.6
237	337.50	.40000-01	915.00	.4542	.6047	.5396	.9682	.2985-01	.2512-01	3.537	22.27	560.1
237	337.50	.50000-01	916.00	.4352	.5759	.5259	.9647	.2909-01	.2408-01	3.454	22.16	557.4
237	337.50	.70000-01	918.00	.1472	.1808	.1743	.9582	.9640-02	.8145-02	1.537	10.88	512.2
237	337.50	.80000-01	919.00	.2963	.3815	.3701	.9553	.2047-01	.1639-01	2.571	17.57	544.0
237	337.50	.10000+00	920.00	.2430	.3088	.3086	.9501	.1707-01	.1344-01	2.210	14.84	536.5
237	337.50	.15000	921.00	.1459	.1837	.1931	.9405	.1068-01	.8073-02	1.377	10.07	530.3
237	337.50	.20000	922.00	.9480-01	.1178	.1267	.9356	.7007-02	.5244-02	.9410	6.352	521.4
237	337.50	.42000	923.00	.1055	.1363	.1498	.9345	.8286-02	.5836-02	.9060	5.915	545.6
239	337.50	.42500	2167.0	.1087	.1408	.1549	.9345	.8564-02	.6009-02	.9270	5.975	548.4
239	337.50	.43000	2172.0	.5000-03	.6000-03	.7000-03	.9345	.3779-04	.2767-04	.5000-02	.3100-01	530.9
237	337.50	.43500	924.00	.1142	.1478	.1626	.9345	.8996-02	.6315-02	.9730	6.366	546.8
237	337.50	.85000	926.00	.5220-01	.6620-01	.7220-01	.9345	.3991-02	.2889-02	.4800	3.126	534.6

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
237	337.50	.86000	927.00	.4950-01	.6270-01	.6830-01	.9345	.3780-02	.2738-02	.4560	2.977	534.3
237	337.50	.87000	928.00	.4700-01	.5940-01	.6470-01	.9345	.3580-02	.2597-02	.4340	2.844	533.7
237	337.50	.88000	929.00	.7040-01	.8740-01	.9450-01	.9345	.5228-02	.3896-02	.7020	4.655	520.7
237	337.50	.89000	930.00	.3720-01	.4730-01	.5170-01	.9345	.2861-02	.2056-02	.3350	2.217	537.8
237	337.50	.90000	931.00	.2720-01	.3460-01	.3780-01	.9345	.2092-02	.1505-02	.2460	1.668	537.3
237	337.50	.91000	932.00	.2030-01	.2570-01	.2790-01	.9345	.1544-02	.1125-02	.1910	1.405	531.6
241	337.50	.92600	933.00	.3020-01	.3830-01	.4180-01	.9345	.2313-02	.1667-02	.2750	2.017	539.0
241	343.12	.41500	934.00	.1035	.1336	.1469	.9345	.8118-02	.5722-02	.8940	5.795	548.0
241	343.12	.42000	935.00	.1074	.1398	.1541	.9345	.8519-02	.5937-02	.9040	5.896	552.0
241	343.12	.42500	936.00	.1280	.1680	.1860	.9345	.1028-01	.7071-02	1.045	6.823	556.5
241	343.12	.44500	939.00	.1128	.1475	.1631	.9345	.9011-02	.6231-02	.9320	6.164	554.7
241	343.12	.45000	940.00	.1141	.1491	.1648	.9345	.9105-02	.6308-02	.9470	6.267	554.1
241	343.12	.50000	941.00	.1205	.1582	.1752	.9345	.9680-02	.6657-02	.9830	6.637	556.5
241	343.12	.60000	942.00	.1033	.1329	.1458	.9345	.8057-02	.5709-02	.9040	5.830	545.9
241	343.12	.80000	944.00	.5450-01	.6930-01	.7560-01	.9345	.4178-02	.3012-02	.4980	3.263	538.9
239	345.56	.42500	2168.0	.1231	.1619	.1794	.9345	.9916-02	.6804-02	.9980	6.405	556.1
239	345.56	.92600	2160.0	.3830-01	.4840-01	.5270-01	.9345	.2912-02	.2117-02	.3570	2.537	534.1
241	348.00	.35000	945.00	.1270-01	.1590-01	.1730-01	.9345	.9553-03	.6995-03	.1210	.7700	531.9
241	348.00	.36000	946.00	.5270-01	.6630-01	.7210-01	.9345	.3986-02	.2913-02	.5000	3.198	532.8
241	348.00	.37000	947.00	.6860-01	.8640-01	.9400-01	.9345	.5192-02	.3789-02	.6470	4.150	533.5
237	348.00	.37500	948.00	.7620-01	.9670-01	.1054	.9345	.5833-02	.4216-02	.6980	4.475	535.3
237	348.00	.38000	949.00	.7820-01	.9990-01	.1093	.9345	.6049-02	.4328-02	.6980	4.507	539.5
237	348.00	.38500	950.00	.9130-01	.1169	.1281	.9345	.7088-02	.5048-02	.8050	5.207	541.4
237	348.00	.39000	951.00	.8960-01	.1148	.1257	.9345	.6956-02	.4956-02	.7910	5.147	541.2
237	348.00	.39500	952.00	.8780-01	.1124	.1231	.9345	.6809-02	.4855-02	.7770	4.980	540.9
237	348.00	.40000	953.00	.8380-01	.1074	.1176	.9345	.6508-02	.4637-02	.7410	4.832	541.2
237	348.00	.41000	955.00	.1005	.1308	.1443	.9345	.7983-02	.5558-02	.8400	5.473	549.7
237	348.00	.41500	956.00	.2570-01	.3290-01	.3610-01	.9345	.1994-02	.1424-02	.2280	1.500	540.4
237	348.00	.42000	957.00	.1200	.1579	.1751	.9345	.9684-02	.6640-02	.9700	6.339	554.8
237	348.00	.42500	958.00	.1128	.1474	.1629	.9345	.9012-02	.6238-02	.9300	6.091	551.7
237	348.00	.43000	959.00	.1272	.1674	.1856	.9345	.1027-01	.7038-02	1.027	6.693	555.0
237	348.00	.44000	960.00	.1222	.1607	.1781	.9345	.9852-02	.6762-02	.9900	6.470	554.5
237	348.00	.44500	961.00	.1223	.1610	.1785	.9345	.9872-02	.6767-02	.9880	6.455	554.9
237	348.00	.85000	968.00	.6020-01	.7620-01	.8310-01	.9345	.4594-02	.3328-02	.5540	3.618	534.3
237	348.00	.86000	969.00	.5470-01	.6950-01	.7580-01	.9345	.4193-02	.3027-02	.4990	3.267	535.9
238	348.00	.89000	972.00	.4690-01	.6010-01	.6570-01	.9345	.3636-02	.2596-02	.4170	2.778	541.3
238	348.00	.91000	974.00	.3580-01	.4530-01	.4930-01	.9345	.2727-02	.1979-02	.3320	2.437	534.2
239	354.00	.42500	2169.0	.1436	.1917	.2140	.9345	.1183-01	.7936-02	1.110	7.098	562.9
239	354.00	.43000	2174.0	.1440	.1921	.2143	.9345	.1184-01	.7958-02	1.116	7.142	562.5
239	354.00	.43500	2177.0	.1398	.1854	.2062	.9345	.1140-01	.7726-02	1.104	7.072	559.8
239	354.00	.44000	2179.0	.1423	.1899	.2119	.9345	.1171-01	.7864-02	1.102	7.048	562.6
239	355.16	.92600	2158.0	.5320-01	.6770-01	.7390-01	.9345	.4084-02	.2943-02	.4850	3.496	538.0

EXTERNAL TANK

PARAMETRIC DATA

ALPHA = -5.000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
222	-5.050	-9.100	4.020	72.30	747.0	176.6	.4630	5.243	2618.	.2202-03	.1422-06	4.055
223	-5.070	-9.100	4.020	72.30	747.0	176.6	.4640	5.244	2617.	.2203-03	.1421-06	4.056
224	-5.040	-9.000	4.020	72.30	747.0	176.6	.4630	5.242	2617.	.2202-03	.1421-06	4.054
234	-5.020	-9.000	4.020	72.60	751.0	177.5	.4660	5.268	2624.	.2202-03	.1429-06	4.044
235	-5.020	-9.000	4.020	72.60	750.0	177.3	.4660	5.267	2623.	.2204-03	.1427-06	4.050
236	-5.060	-9.100	4.020	72.60	751.0	177.3	.4660	5.268	2623.	.2203-03	.1428-06	4.048

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
222	.5098-01	.1142-01
223	.5098-01	.1142-01
224	.5097-01	.1142-01
234	.5113-01	.1143-01
235	.5112-01	.1142-01
236	.5113-01	.1143-01

TEST DATA

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
223	.00000	.25000-01	2187.0	.5002	.6404	.5739	.9707	.2926-01	.2550-01	4.352	30.28	576.6
223	.00000	.30000-01	2188.0	.5081	.6475	.5821	.9705	.2967-01	.2590-01	4.497	31.54	573.6
222	.00000	.40000-01	600.00	.6250	.7628	.7104	.9667	.3622-01	.3186-01	6.591	42.52	540.4
222	.00000	.50000-01	601.00	.4231	.5239	.4931	.9631	.2514-01	.2157-01	4.189	26.93	553.1
222	.00000	.70000-01	603.00	.3454	.4250	.4130	.9563	.2105-01	.1761-01	3.513	23.96	547.8
222	.00000	.80000-01	604.00	.3326	.4085	.4028	.9531	.2053-01	.1696-01	3.412	22.20	546.1
222	.00000	.15000	606.00	.1606	.1944	.2076	.9348	.1059-01	.8186-02	1.760	12.89	532.3
222	.00000	.20000	607.00	.9450-01	.1142	.1266	.9265	.6453-02	.4818-02	1.045	6.872	530.4
222	.00000	.21000	608.00	.7680-01	.9420-01	.1061	.9253	.5407-02	.3913-02	.7910	5.471	545.1
222	.00000	.22000	609.00	.6450-01	.7900-01	.8930-01	.9243	.4554-02	.3286-02	.6680	4.977	544.0
222	.00000	.30000	610.00	.5810-01	.7130-01	.8120-01	.9228	.4140-02	.2964-02	.6020	4.125	544.2
222	.00000	.35000	611.00	.5220-01	.6370-01	.7230-01	.9228	.3684-02	.2661-02	.5520	3.693	539.7

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN, EXTERNAL TANK HI/HREF

(RVZT34)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
222	.00000	.36000	612.00	.5390-01	.6580-01	.7470-01	.9228	.3807-02	.2749-02	.5710	3.851	539.7
222	.00000	.37500	614.00	.5200-01	.6360-01	.7240-01	.9228	.3690-02	.2652-02	.5430	3.660	542.4
224	.00000	.38500	616.00	.5410-01	.6620-01	.7540-01	.9228	.3843-02	.2756-02	.5620	3.782	543.4
224	.00000	.39500	618.00	.8110-01	.9990-01	.1142	.9228	.5823-02	.4132-02	.8210	5.528	548.6
224	.00000	.40000	619.00	.9070-01	.1123	.1290	.9228	.6576-02	.4621-02	.8960	5.985	553.3
224	.00000	.40500	620.00	.1053	.1298	.1486	.9228	.7577-02	.5365-02	1.060	7.114	549.7
224	.00000	.41500	622.00	.1716	.2138	.2467	.9228	.1257-01	.8748-02	1.658	11.05	557.7
224	.00000	.43000	625.00	.1699	.2119	.2448	.9228	.1248-01	.8659-02	1.631	10.90	558.8
224	.00000	.44000	626.00	.1648	.2055	.2373	.9228	.1209-01	.8400-02	1.586	10.60	558.4
224	.00000	.44500	627.00	.1405	.1752	.2023	.9228	.1031-01	.7161-02	1.351	9.112	558.5
224	.00000	.45000	628.00	.1289	.1607	.1855	.9228	.9454-02	.6571-02	1.242	8.379	558.1
224	.00000	.45500	629.00	.1072	.1336	.1542	.9228	.7862-02	.5462-02	1.032	7.068	558.3
222	.00000	.46000	630.00	.9450-01	.1190	.1387	.9228	.7069-02	.4816-02	.8710	5.799	566.4
222	.00000	.47000	631.00	.8540-01	.1074	.1249	.9228	.6366-02	.4355-02	.7950	5.296	564.7
222	.00000	.48000	632.00	.8360-01	.1053	.1227	.9228	.6253-02	.4262-02	.7720	5.169	566.2
222	.00000	.49000	633.00	.7110-01	.8920-01	.1036	.9228	.5283-02	.3622-02	.6650	4.496	563.8
222	.00000	.50000	634.00	.5360-01	.6710-01	.7780-01	.9228	.3967-02	.2730-02	.5050	3.505	562.3
222	.00000	.55000	635.00	.8310-01	.1041	.1206	.9228	.6150-02	.4237-02	.7850	5.177	561.9
222	.00000	.60000	636.00	.8060-01	.9980-01	.1147	.9228	.5850-02	.4107-02	.7950	5.110	553.7
222	.00000	.65000	637.00	.8720-01	.1078	.1237	.9228	.6305-02	.4447-02	.8700	5.614	551.6
222	.00000	.70000	638.00	.8820-01	.1092	.1255	.9228	.6400-02	.4495-02	.8710	5.944	553.5
222	.00000	.75000	639.00	.5700-01	.7020-01	.8030-01	.9228	.4092-02	.2904-02	.5770	3.717	548.7
222	.00000	.80000	640.00	.6700-01	.8190-01	.9320-01	.9228	.4753-02	.3413-02	.6980	4.384	542.7
222	.00000	.85000	641.00	.6470-01	.7890-01	.8960-01	.9228	.4569-02	.3298-02	.6840	4.338	539.9
222	.00000	.87000	643.00	.6020-01	.7350-01	.8350-01	.9228	.4256-02	.3070-02	.6350	4.110	540.4
222	.00000	.88000	644.00	.5790-01	.7080-01	.8040-01	.9228	.4099-02	.2954-02	.6100	3.977	540.9
224	.00000	.89000	645.00	.5590-01	.6830-01	.7760-01	.9228	.3956-02	.2848-02	.5870	3.872	541.3
224	.00000	.90000	646.00	.1376	.1812	.2190	.9228	.1116-01	.7013-02	1.088	7.150	592.1
224	.00000	.95000	649.00	.2200-01	.2640-01	.2970-01	.9228	.1511-02	.1119-02	.2490	1.836	524.9
236	5.6250	.42500	2170.0	.1933	.2455	.2883	.9226	.1474-01	.9881-02	1.741	11.17	574.3
236	5.6250	.43500	2178.0	.1449	.1830	.2139	.9226	.1094-01	.7409-02	1.335	8.579	570.4
224	11.250	.35000	650.00	.4910-01	.5980-01	.6800-01	.9223	.3466-02	.2504-02	.5240	3.536	538.1
224	11.250	.37000	652.00	.4130-01	.5030-01	.5720-01	.9223	.2917-02	.2104-02	.4380	2.955	539.1
224	11.250	.37500	653.00	.4450-01	.5420-01	.6170-01	.9223	.3143-02	.2266-02	.4710	3.188	539.3
224	11.250	.38000	654.00	.4510-01	.5500-01	.6260-01	.9223	.3193-02	.2301-02	.4780	3.235	539.5
224	11.250	.40500	659.00	.7220-01	.8940-01	.1030	.9223	.5248-02	.3682-02	.7160	4.829	552.7
224	11.250	.41500	661.00	.1226	.1531	.1776	.9223	.9054-02	.6247-02	1.169	7.806	560.1
224	11.250	.42000	662.00	.1421	.1791	.2094	.9223	.1067-01	.7241-02	1.307	8.723	566.7
224	11.250	.42500	663.00	.1382	.1746	.2044	.9223	.1042-01	.7045-02	1.263	8.450	568.0
224	11.250	.43000	664.00	.1455	.1834	.2143	.3223	.1092-01	.7417-02	1.341	9.065	566.4
224	11.250	.44000	665.00	.1172	.1479	.1729	.9223	.8813-02	.5973-02	1.076	7.225	567.1
224	11.250	.45000	666.00	.1113	.1404	.1641	.9223	.8364-02	.5672-02	1.023	6.867	566.9
224	11.250	.45500	667.00	.9900-01	.1249	.1461	.9223	.7446-02	.5044-02	.9070	6.092	567.3

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN, EXTERNAL TANK HI/HREF

(RVZT34)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
224	11.250	.46000	668.00	.9250-01	.1164	.1359	.9223	.6927-02	.4713-02	.8560	5.768	565.6
224	11.250	.47000	669.00	.7780-01	.9780-01	.1139	.9223	.5805-02	.3968-02	.7280	4.924	563.8
224	11.250	.48000	670.00	.5570-01	.6990-01	.8150-01	.9223	.4152-02	.2837-02	.5200	3.517	564.0
224	11.250	.49000	671.00	.4790-01	.6020-01	.7000-01	.9223	.3570-02	.2443-02	.4490	3.031	563.3
224	11.250	.50000	672.00	.4720-01	.5930-01	.6900-01	.9223	.3515-02	.2407-02	.4430	3.055	563.1
224	11.250	.70000	674.00	.5230-01	.6480-01	.7470-01	.9223	.3805-02	.2664-02	.5160	3.496	553.7
224	11.250	.85000	676.00	.3950-01	.4810-01	.5470-01	.9223	.2787-02	.2014-02	.4210	2.691	538.0
224	11.250	.87000	678.00	.3530-01	.4310-01	.4900-01	.9223	.2499-02	.1802-02	.3750	2.427	539.1
224	11.250	.88000	679.00	.3800-01	.4640-01	.5280-01	.9223	.2692-02	.1936-02	.4000	2.620	540.5
224	11.250	.90000	681.00	.2140-01	.2610-01	.2970-01	.9223	.1513-02	.1090-02	.2260	1.533	539.5
224	11.250	.92600	683.00	.1320-01	.1610-01	.1830-01	.9223	.9340-03	.6744-03	.1410	1.035	538.4
224	11.250	.95000	684.00	.1370-01	.1650-01	.1860-01	.9223	.9486-03	.7002-03	.1550	1.133	525.7
224	17.000	.33000	685.00	.4800-01	.5850-01	.6660-01	.9222	.3396-02	.2447-02	.5100	3.439	539.0
224	17.000	.35000	687.00	.4600-01	.5600-01	.6370-01	.9222	.3245-02	.2345-02	.4920	3.322	537.4
236	17.000	.35500	2102.0	.4490-01	.5450-01	.6200-01	.9222	.3169-02	.2293-02	.4850	3.186	539.1
224	17.000	.36000	688.00	.4400-01	.5350-01	.6080-01	.9222	.3097-02	.2240-02	.4710	3.182	537.0
224	17.000	.37000	689.00	.4600-01	.5600-01	.6370-01	.9222	.3246-02	.2345-02	.4910	3.318	537.7
224	17.000	.37500	690.00	.4860-01	.5920-01	.6730-01	.9222	.3428-02	.2479-02	.5210	3.530	537.1
236	17.000	.42500	2171.0	.1390	.1735	.2014	.9222	.1030-01	.7106-02	1.340	8.524	562.0
236	17.000	.43000	2176.0	.1354	.1695	.1971	.9222	.1008-01	.6924-02	1.292	8.334	563.9
222	17.000	.50000	691.00	.7820-01	.9770-01	.1133	.9222	.5778-02	.3987-02	.7490	4.999	559.6
222	17.000	.60000	692.00	.4730-01	.5810-01	.6670-01	.9222	.3400-02	.2409-02	.4810	3.100	547.7
222	17.000	.70000	693.00	.3310-01	.4080-01	.4680-01	.9222	.2388-02	.1690-02	.3360	2.278	548.3
222	17.000	.80000	694.00	.2790-01	.3410-01	.3880-01	.9222	.1977-02	.1424-02	.2960	1.868	539.4
222	17.000	.87000	695.00	.2840-01	.3460-01	.3940-01	.9222	.2007-02	.1447-02	.3020	1.931	538.8
236	20.980	.35500	2098.0	.3730-01	.4520-01	.5130-01	.9221	.2624-02	.1909-02	.4100	2.737	535.8
236	20.980	.36000	2099.0	.3920-01	.4760-01	.5410-01	.9221	.2765-02	.2007-02	.4280	2.832	537.2
236	20.980	.36500	2100.0	.4040-01	.4900-01	.5560-01	.9221	.2842-02	.2068-02	.4440	2.938	535.9
236	23.070	.35500	2094.0	.3820-01	.4630-01	.5260-01	.9220	.2690-02	.1951-02	.4160	2.749	537.5
236	23.070	.36000	2095.0	.4080-01	.4950-01	.5620-01	.9220	.2874-02	.2088-02	.4470	2.957	536.5
236	23.070	.36500	2096.0	.4530-01	.5500-01	.6240-01	.9220	.3192-02	.2318-02	.4960	3.278	536.8
235	23.070	.43500	2000.0	.1144	.1412	.1625	.9220	.8306-02	.5850-02	1.157	7.396	552.4
235	23.070	.56890	2001.0	.3950-01	.4900-01	.5660-01	.9220	.2895-02	.2020-02	.3910	2.660	556.8
235	23.070	.70270	2002.0	.2510-01	.3080-01	.3530-01	.9220	.1803-02	.1282-02	.2600	1.850	547.7
235	23.070	.83500	2003.0	.3990-01	.4860-01	.5540-01	.9220	.2830-02	.2041-02	.4280	2.731	540.4
235	23.070	.90000	2004.0	.2920-01	.3540-01	.4020-01	.9220	.2056-02	.1491-02	.3180	2.145	537.2
236	23.070	.92600	2154.0	.6700-02	.8100-02	.9100-02	.9220	.4674-03	.3408-03	.7400-01	.5280	534.5
222	29.800	.70000-01	700.00	.2622	.3211	.3242	.9479	.1653-01	.1336-01	2.719	18.42	543.8
222	29.800	.10000+00	701.00	.2262	.2750	.2878	.9396	.1467-01	.1153-01	2.429	15.57	536.6
222	29.800	.15000	702.00	.1512	.1826	.1997	.9294	.1018-01	.7705-02	1.674	12.07	530.1
222	29.800	.20000	703.00	.1147	.1382	.1550	.9235	.7900-02	.5848-02	1.287	8.662	527.1
222	29.800	.30000	704.00	.3870-01	.4730-01	.5400-01	.9220	.2753-02	.1971-02	.4040	2.870	542.2
222	29.800	.35000	705.00	.5010-01	.6100-01	.6950-01	.9220	.3544-02	.2554-02	.5330	3.667	538.5

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
236	29.800	.35500	2090.0	.6150-01	.7480-01	.8510-01	.9220	.4352-02	.3145-02	.6640	4.385	539.5
236	29.800	.36500	2092.0	.6510-01	.7910-01	.8990-01	.9220	.4599-02	.3328-02	.7050	4.644	538.8
224	29.800	.50000	707.00	.4420-01	.5580-01	.6540-01	.9220	.3332-02	.2251-02	.4050	2.741	567.5
224	29.800	.60000	708.00	.1890-01	.2330-01	.2670-01	.9220	.1361-02	.9656-03	.1940	1.235	546.6
224	29.800	.70000	709.00	.1790-01	.2210-01	.2540-01	.9220	.1294-02	.9142-03	.1820	1.157	548.5
224	29.800	.80000	710.00	.3410-01	.4150-01	.4730-01	.9220	.2409-02	.1736-02	.3630	2.269	538.4
236	31.430	.44000	2166.0	.9680-01	.1192	.1368	.9220	.6995-02	.4952-02	.9920	6.579	550.1
235	31.430	.47600	2005.0	.8960-01	.1114	.1291	.9220	.6600-02	.4579-02	.8750	5.775	559.1
235	31.430	.51100	2006.0	.3520-01	.4400-01	.5120-01	.9220	.2618-02	.1802-02	.3380	2.297	562.5
235	31.430	.61600	2009.0	.1390-01	.1700-01	.1950-01	.9220	.9955-03	.7108-03	.1450	.9960	545.6
235	31.430	.65000	2010.0	.1540-01	.1880-01	.2140-01	.9220	.1096-02	.7861-03	.1630	1.132	543.4
235	31.430	.68600	2014.0	.1810-01	.2220-01	.2540-01	.9220	.1296-02	.9249-03	.1890	1.318	545.9
235	31.430	.72050	2015.0	.7000-02	.8500-02	.9700-02	.9220	.4968-03	.3586-03	.7500-01	.5610	539.8
235	31.430	.79040	2017.0	.3110-01	.3790-01	.4310-01	.9220	.2205-02	.1589-02	.3330	2.111	540.6
235	31.430	.86000	2019.0	.6700-02	.8100-02	.9200-02	.9220	.4716-03	.3432-03	.7400-01	.4780	535.3
235	31.430	.89520	2020.0	.3660-01	.4450-01	.5070-01	.9220	.2590-02	.1873-02	.3950	2.582	539.0
236	31.430	.92600	2153.0	.1250-01	.1510-01	.1710-01	.9220	.8751-03	.6401-03	.1400	1.025	532.5
235	33.750	.25000	2079.0	.2500-01	.3050-01	.3470-01	.9220	.1774-02	.1278-02	.2680	2.203	540.9
235	33.750	.30000	2080.0	.3880-01	.4740-01	.5400-01	.9220	.2760-02	.1985-02	.4140	2.732	541.7
235	33.750	.37500	2081.0	.7910-01	.9630-01	.1095	.9220	.5600-02	.4045-02	.8530	5.684	539.4
235	33.750	.40000	2082.0	.9320-01	.1141	.1305	.9220	.6671-02	.4763-02	.9740	6.474	545.6
235	33.750	.45000	2084.0	.9180-01	.1130	.1298	.9220	.6637-02	.4691-02	.9360	6.203	550.7
235	33.750	.60000	2085.0	.1550-01	.1900-01	.2170-01	.9220	.1112-02	.7913-03	.1610	1.066	547.2
236	33.750	.92600	2152.0	.1100-01	.1330-01	.1500-01	.9220	.7679-03	.5615-03	.1220	.8980	532.8
235	36.320	.25000	2066.0	.1043	.1283	.1472	.9220	.7527-02	.5333-02	1.071	7.101	549.4
235	36.320	.30000	2067.0	.3720-01	.4530-01	.5170-01	.9220	.2642-02	.1901-02	.3970	2.617	541.6
235	36.320	.35000	2069.0	.6770-01	.8240-01	.9390-01	.9220	.4799-02	.3460-02	.7250	4.831	540.6
235	36.320	.37500	2070.0	.7670-01	.9340-01	.1065	.9220	.5443-02	.3919-02	.8190	5.455	541.2
235	36.320	.40000	2071.0	.7880-01	.9630-01	.1099	.9220	.5620-02	.4026-02	.8310	5.525	543.9
235	36.320	.42000	2072.0	.1186	.1463	.1683	.9220	.8602-02	.6064-02	1.203	7.966	551.9
235	36.320	.42500	2073.0	.1167	.1441	.1659	.9220	.8481-02	.5964-02	1.176	7.786	553.0
235	36.320	.43000	2074.0	.1103	.1360	.1564	.9220	.7993-02	.5640-02	1.121	7.427	551.4
235	36.320	.43500	2075.0	.1050	.1295	.1490	.9220	.7619-02	.5367-02	1.063	7.037	552.2
235	36.320	.45000	2076.0	.9460-01	.1145	.1298	.9220	.6637-02	.4835-02	1.042	6.960	534.7
235	36.320	.60000	2077.0	.1810-01	.2210-01	.2530-01	.9220	.1295-02	.9235-03	.1880	1.262	546.4
235	36.320	.65000	2078.0	.1710-01	.2090-01	.2390-01	.9220	.1223-02	.8741-03	.1790	1.229	545.0
224	37.700	.50000-01	715.00	.3250	.4005	.3968	.9520	.2022-01	.1657-01	3.282	21.39	549.1
224	37.700	.70000-01	716.00	.2751	.3361	.3425	.9458	.1746-01	.1402-01	2.882	19.72	541.7
224	37.700	.10000+00	717.00	.2128	.2577	.2717	.9378	.1385-01	.1085-01	2.327	15.20	532.7
224	37.700	.15000	718.00	.1811	.2183	.2399	.9281	.1223-01	.9233-02	2.025	14.96	527.9
224	37.700	.20000	719.00	.1301	.1564	.1757	.9229	.8954-02	.6633-02	1.474	10.05	525.0
224	37.700	.30000	720.00	.3290-01	.4020-01	.4590-01	.9220	.2339-02	.1675-02	.3440	2.464	542.0
222	37.700	.35000	721.00	.6880-01	.8380-01	.9550-01	.9220	.4869-02	.3505-02	.7290	5.075	539.2

IH72, OTS CLEAN, EXTERNAL TANK HI/HREF (RVZT34)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
222	37.700	.50000	723.00	.9910-01	.1225	.1411	.9220	.7191-02	.5053-02	.9910	6.829	551.2
222	37.700	.60000	724.00	.5410-01	.6660-01	.7640-01	.9220	.3896-02	.2760-02	.5520	3.525	547.4
222	37.700	.70000	725.00	.3290-01	.4050-01	.4650-01	.9220	.2368-02	.1679-02	.3360	2.136	547.1
222	37.700	.80000	726.00	.2680-01	.3260-01	.3710-01	.9220	.1891-02	.1364-02	.2860	1.802	538.0
222	37.700	.87000	727.00	.3010-01	.3670-01	.4180-01	.9220	.2130-02	.1535-02	.3200	2.057	538.5
222	37.700	.92600	728.00	.1260-01	.1530-01	.1740-01	.9220	.8848-03	.6403-03	.1350	.9870	536.3
223	39.000	.10000-01	993.00	.3561	.4656	.4393	.9598	.2239-01	.1815-01	2.882	20.52	588.4
223	39.000	.25000-01	994.00	.4057	.5076	.4861	.9588	.2478-01	.2068-01	3.848	25.99	561.1
235	45.000	.25000	2036.0	.1120-01	.1360-01	.1550-01	.9220	.7914-03	.5710-03	.1200	.9740	540.1
235	45.000	.30000	2037.0	.8000-03	.1000-02	.1100-02	.9220	.5704-04	.4161-04	.9000-02	.6300-01	533.9
235	45.000	.32500	2038.0	.6220-01	.7600-01	.8680-01	.9220	.4438-02	.3180-02	.6560	4.499	543.8
235	45.000	.35000	2039.0	.8430-01	.1032	.1180	.9220	.6033-02	.4307-02	.8810	5.944	545.6
235	45.000	.37500	2040.0	.6020-01	.7370-01	.8420-01	.9220	.4306-02	.3077-02	.6310	4.259	545.1
235	45.000	.40000	2041.0	.3440-01	.4210-01	.4810-01	.9220	.2457-02	.1759-02	.3630	2.448	544.1
235	45.000	.43000	2044.0	.7030-01	.8620-01	.9860-01	.9220	.5042-02	.3595-02	.7330	4.943	546.3
235	45.000	.44000	2046.0	.8280-01	.1017	.1165	.9220	.5958-02	.4233-02	.8550	5.763	548.1
235	45.000	.45000	2047.0	.8250-01	.1014	.1163	.9220	.5946-02	.4219-02	.8500	5.762	548.7
235	45.000	.47000	2048.0	.7010-01	.8610-01	.9880-01	.9220	.5052-02	.3582-02	.7200	4.924	549.1
235	45.000	.55000	2049.0	.3720-01	.4570-01	.5250-01	.9220	.2682-02	.1901-02	.3820	2.619	549.3
235	45.000	.60000	2050.0	.3680-01	.4540-01	.5220-01	.9220	.2670-02	.1882-02	.3730	2.510	551.8
235	45.000	.65000	2051.0	.2770-01	.3390-01	.3890-01	.9220	.1988-02	.1415-02	.2870	1.913	547.2
235	45.000	.75000	2052.0	.1100-01	.1340-01	.1530-01	.9220	.7811-03	.5632-03	.1180	.7530	540.5
235	45.000	.80000	2053.0	.2840-01	.3450-01	.3930-01	.9220	.2007-02	.1452-02	.3070	1.936	538.8
235	45.000	.83000	2054.0	.1890-01	.2290-01	.2610-01	.9220	.1334-02	.9644-03	.2040	1.282	538.9
235	45.000	.84000	2055.0	.1970-01	.2400-01	.2730-01	.9220	.1394-02	.1010-02	.2140	1.350	537.9
235	45.000	.85000	2056.0	.2100-01	.2550-01	.2900-01	.9220	.1482-02	.1073-02	.2280	1.453	538.1
235	45.000	.86000	2057.0	.2380-01	.2890-01	.3280-01	.9220	.1676-02	.1214-02	.2580	1.685	537.9
235	45.000	.87000	2058.0	.2450-01	.2970-01	.3380-01	.9220	.1729-02	.1251-02	.2650	1.773	538.4
235	45.000	.88000	2059.0	.2330-01	.2840-01	.3240-01	.9220	.1654-02	.1193-02	.2500	1.671	540.5
235	45.000	.89000	2060.0	.2420-01	.2940-01	.3350-01	.9220	.1713-02	.1235-02	.2590	1.738	540.3
235	45.000	.90000	2061.0	.9600-02	.1170-01	.1320-01	.9220	.6756-03	.4925-03	.1060	.7170	534.3
235	45.000	.91000	2062.0	.1660-01	.2020-01	.2300-01	.9220	.1175-02	.8467-03	.1770	1.455	540.8
235	45.000	.92600	2063.0	.7400-02	.9000-02	.1030-01	.9220	.5243-03	.3805-03	.8100-01	.5760	536.9
235	45.000	.93500	2064.0	.1260-01	.1530-01	.1740-01	.9220	.8897-03	.6435-03	.1360	1.020	538.7
235	45.000	.94500	2065.0	.1790-01	.2160-01	.2440-01	.9220	.1246-02	.9153-03	.2020	1.352	529.7
222	180.00	.15000-01	2182.0	.4917	.6703	.6478	.9548	.3302-01	.2507-01	3.515	25.64	607.0
222	180.00	.20000-01	2183.0	.4823	.6201	.6069	.9538	.3094-01	.2459-01	4.134	30.89	579.1
222	180.00	.25000-01	2184.0	.2351	.2798	.2758	.9538	.1406-01	.1198-01	2.802	20.79	513.5
222	180.00	.40000-01	737.00	.3369	.4039	.4036	.9502	.2058-01	.1717-01	3.866	25.54	522.2
222	180.00	.45000-01	738.00	.4305	.5325	.5362	.9485	.2733-01	.2195-01	4.281	28.27	552.2
222	180.00	.60000-01	739.00	.3991	.4905	.5045	.9439	.2572-01	.2035-01	4.083	27.44	546.6
222	180.00	.70000-01	740.00	.3142	.3852	.4013	.9411	.2046-01	.1602-01	3.246	21.97	544.6
222	180.00	.80000-01	741.00	.3552	.4339	.4572	.9385	.2331-01	.1811-01	3.733	27.21	541.2

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
222	180.00	.10000+00	742.00	.3029	.3683	.3960	.9338	.2019-01	.1544-01	3.248	21.81	537.0
222	180.00	.12500	743.00	.3350	.4062	.4459	.9291	.2273-01	.1708-01	3.639	26.63	534.2
222	180.00	.15000	744.00	.2941	.3560	.3969	.9256	.2023-01	.1499-01	3.219	22.54	532.6
222	180.00	.17500	745.00	.2061	.2487	.2796	.9233	.1425-01	.1051-01	2.293	17.39	529.1
222	180.00	.20000	746.00	.1152	.1384	.1560	.9221	.7953-02	.5870-02	1.304	9.434	525.1
222	180.00	.21500	747.00	.3230-01	.3960-01	.4530-01	.9220	.2310-02	.1645-02	.3330	2.312	544.7
222	180.00	.23000	748.00	.2470-01	.3040-01	.3490-01	.9220	.1779-02	.1261-02	.2520	1.865	547.1
222	180.00	.24000	749.00	.1450-01	.1790-01	.2060-01	.9220	.1052-02	.7410-03	.1460	1.100	550.2
222	180.00	.35000	752.00	.1750-01	.2130-01	.2430-01	.9220	.1240-02	.8920-03	.1850	1.176	539.5
222	180.00	.40000	753.00	.2890-01	.3510-01	.3990-01	.9220	.2034-02	.1474-02	.3120	2.019	535.5
222	180.00	.50000	754.00	.3720-01	.4510-01	.5110-01	.9220	.2607-02	.1894-02	.4040	2.659	534.1
222	180.00	.60000	755.00	.3090-01	.3760-01	.4280-01	.9220	.2180-02	.1574-02	.3300	2.127	537.6
222	180.00	.70000	756.00	.2490-01	.3010-01	.3410-01	.9220	.1737-02	.1271-02	.2760	1.840	530.0
222	235.00	.80000	757.00	.2180-01	.2640-01	.2990-01	.9220	.1525-02	.1110-02	.2380	1.501	533.0
222	235.00	.22000	759.00	.5480-01	.6740-01	.7660-01	.9241	.3903-02	.2795-02	.5590	4.154	547.5
222	235.00	.25000	760.00	.3130-01	.3850-01	.4400-01	.9227	.2242-02	.1595-02	.3190	2.501	547.1
222	235.00	.30000	762.00	.6000-01	.7410-01	.8490-01	.9227	.4328-02	.3060-02	.6030	3.622	550.1
222	235.00	.32000	763.00	.6040-01	.7440-01	.8520-01	.9227	.4342-02	.3080-02	.6120	3.620	548.5
222	235.00	.34000	764.00	.8180-01	.1011	.1160	.9227	.5914-02	.4170-02	.8170	4.837	551.3
222	235.00	.36000	765.00	.1131	.1402	.1614	.9227	.8227-02	.5765-02	1.113	6.670	554.2
222	235.00	.38000	766.00	.6540-01	.8060-01	.9230-01	.9227	.4706-02	.3335-02	.6610	4.014	549.0
224	247.00	.23000	768.00	.6560-01	.8080-01	.9190-01	.9241	.4683-02	.3344-02	.6630	4.929	548.9
224	247.00	.25000	769.00	.3950-01	.4850-01	.5530-01	.9233	.2821-02	.2012-02	.4020	3.123	547.6
224	247.00	.27000	770.00	.4730-01	.5830-01	.6660-01	.9233	.3396-02	.2409-02	.4750	3.461	550.0
224	247.00	.30000	772.00	.8980-01	.1113	.1275	.9233	.6499-02	.4578-02	.8880	5.407	553.3
224	247.00	.31000	773.00	.1023	.1271	.1460	.9233	.7443-02	.5212-02	.9970	6.013	556.0
224	247.00	.32000	774.00	.1380	.1731	.2002	.9233	.1021-01	.7034-02	1.297	7.733	562.9
224	247.00	.32500	775.00	.1535	.1930	.2237	.9233	.1140-01	.7822-02	1.427	8.527	564.8
224	247.00	.33000	776.00	.1579	.1989	.2310	.9233	.1177-01	.8047-02	1.457	8.720	566.2
224	247.00	.33500	777.00	.1535	.1939	.2255	.9233	.1149-01	.7826-02	1.405	8.407	567.7
224	247.00	.34000	778.00	.1685	.2120	.2459	.9233	.1254-01	.8588-02	1.563	9.360	565.3
224	247.00	.34500	779.00	.1419	.1790	.2079	.9233	.1060-01	.7233-02	1.305	7.832	566.8
224	247.00	.35000	780.00	.1232	.1541	.1779	.9233	.9068-02	.6280-02	1.170	7.064	560.9
224	247.00	.35500	781.00	.9000-03	.1200-02	.1300-02	.9233	.6616-04	.4832-04	.1000-01	.6300-01	534.7
222	247.00	.36000	782.00	.1055	.1312	.1507	.9233	.7684-02	.5378-02	1.027	6.228	556.4
222	247.00	.36500	783.00	.9150-01	.1131	.1293	.9233	.6590-02	.4666-02	.9150	5.552	551.1
222	247.00	.37000	784.00	.7940-01	.9760-01	.1113	.9233	.5671-02	.4046-02	.8090	4.943	547.3
222	247.00	.38000	786.00	.6080-01	.7440-01	.8450-01	.9233	.4307-02	.3101-02	.6340	3.929	542.7
222	247.00	.39000	787.00	.5470-01	.6680-01	.7560-01	.9233	.3856-02	.2789-02	.5770	3.589	540.3
222	247.00	.40000	788.00	.5410-01	.6600-01	.7490-01	.9233	.3819-02	.2756-02	.5670	3.554	541.5
223	247.00	.50000	789.00	.9100-02	.1080-01	.1200-01	.9233	.6127-03	.4650-03	.1100	.7220	509.6
223	247.00	.60000	790.00	.1810-01	.2210-01	.2500-01	.9233	.1274-02	.9216-03	.1910	1.258	540.0
223	247.00	.70000	791.00	.4960-01	.6070-01	.6890-01	.9233	.3514-02	.2528-02	.5160	3.650	543.2

IH72, OTS CLEAN, EXTERNAL TANK HI/HREF (RVZT34)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
223	247.00	.90000	793.00	.7400-02	.9000-02	.1020-01	.9233	.5218-03	.3762-03	.7700-01	.4990	542.0
236	247.00	.92600	2144.0	.1300-02	.1600-02	.1900-02	.9234	.9459-04	.6857-04	.1400-01	.1010	541.5
236	247.00	.93000	2149.0	.6300-02	.7700-02	.8700-02	.9234	.4447-03	.3201-03	.6600-01	.4750	545.3
236	250.57	.92600	2143.0	.2700-02	.3300-02	.3700-02	.9236	.1892-03	.1374-03	.2900-01	.2020	541.2
236	250.57	.93000	2148.0	.5900-02	.7200-02	.8100-02	.9236	.4151-03	.2993-03	.6200-01	.4350	544.9
236	250.57	.93700	2087.0	.5190-01	.6320-01	.7140-01	.9236	.3650-02	.2652-02	.5570	3.982	540.6
223	258.00	.27000	794.00	.4840-01	.5950-01	.6750-01	.9240	.3439-02	.2468-02	.4960	3.540	546.1
223	258.00	.29000	795.00	.9990-01	.1242	.1422	.9240	.7251-02	.5094-02	.9730	5.965	556.3
234	258.00	.32000	798.00	.2085	.2699	.3186	.9240	.1629-01	.1066-01	1.762	10.42	585.8
234	258.00	.34000	802.00	.2060	.2675	.3166	.9240	.1619-01	.1054-01	1.723	10.21	587.5
234	258.00	.34500	803.00	.2069	.2648	.3099	.9240	.1584-01	.1058-01	1.819	10.85	579.1
234	258.00	.35500	805.00	.1402	.1753	.2015	.9240	.1030-01	.7170-02	1.347	8.096	563.2
234	258.00	.36000	806.00	.1037	.1287	.1472	.9240	.7528-02	.5301-02	1.024	6.187	558.0
234	258.00	.36500	807.00	.7760-01	.9600-01	.1095	.9240	.5600-02	.3968-02	.7770	4.718	555.1
234	258.00	.37000	808.00	.6590-01	.8140-01	.9270-01	.9240	.4741-02	.3372-02	.6670	4.060	553.3
234	258.00	.37500	809.00	.6470-01	.7970-01	.9070-01	.9240	.4640-02	.3307-02	.6570	4.007	552.2
234	258.00	.38000	810.00	.8470-01	.1044	.1188	.9240	.6075-02	.4329-02	.8600	5.272	552.3
223	258.00	.40000	812.00	.6320-01	.7650-01	.8590-01	.9240	.4379-02	.3221-02	.6920	4.292	532.5
236	258.00	.93500	2151.0	.8200-02	.1000-01	.1130-01	.9240	.5787-03	.4172-03	.8500-01	.6030	546.1
223	270.00	.40000-01	985.00	.4118	.5109	.4569	.9745	.2329-01	.2099-01	4.045	26.21	554.6
223	270.00	.50000-01	986.00	.4145	.5136	.4670	.9709	.2381-01	.2113-01	4.090	26.36	553.7
223	270.00	.60000-01	987.00	.3957	.4865	.4508	.9673	.2298-01	.2017-01	4.037	26.57	547.1
223	270.00	.70000-01	988.00	.3702	.4556	.4284	.9638	.2184-01	.1887-01	3.761	25.27	547.9
223	270.00	.80000-01	989.00	.3251	.3989	.3810	.9604	.1942-01	.1658-01	3.347	23.73	545.3
223	270.00	.10000+00	990.00	.2808	.3412	.3355	.9540	.1710-01	.1432-01	3.023	19.83	536.0
223	270.00	.15000	991.00	.1787	.2166	.2260	.9402	.1152-01	.9111-02	1.946	14.38	533.6
223	270.00	.20000	992.00	.1160	.1395	.1518	.9300	.7741-02	.5912-02	1.309	8.945	525.8
223	270.00	.23000	813.00	.8180-01	.1004	.1129	.9257	.5758-02	.4168-02	.8380	6.092	546.2
223	270.00	.24000	814.00	.6940-01	.8550-01	.9690-01	.9247	.4941-02	.3540-02	.7020	5.677	548.8
223	270.00	.25000	815.00	.4530-01	.5560-01	.6280-01	.9247	.3200-02	.2311-02	.4680	3.695	544.7
223	270.00	.27000	816.00	.4840-01	.5940-01	.6710-01	.9247	.3419-02	.2466-02	.4980	3.542	545.3
223	270.00	.29000	817.00	.2431	.3089	.3579	.9247	.1825-01	.1239-01	2.175	13.35	571.8
223	270.00	.30000	818.00	.2934	.3759	.4383	.9247	.2234-01	.1496-01	2.547	15.33	577.0
223	270.00	.31000	819.00	.2900	.3717	.4336	.9247	.2210-01	.1479-01	2.514	15.01	577.2
223	270.00	.32000	820.00	.2935	.3774	.4413	.9247	.2250-01	.1496-01	2.515	14.96	579.1
223	270.00	.32500	821.00	.2400	.3145	.3731	.9247	.1902-01	.1224-01	1.932	11.40	589.4
223	270.00	.33000	822.00	.1992	.2667	.3220	.9247	.1641-01	.1016-01	1.500	8.832	599.6
223	270.00	.33500	823.00	.3987	.5283	.6324	.9247	.3224-01	.2033-01	3.096	18.32	594.9
223	270.00	.34500	825.00	.2267	.2816	.3211	.9247	.1637-01	.1156-01	2.212	13.31	555.8
223	270.00	.36000	828.00	.1139	.1408	.1600	.9247	.8156-02	.5805-02	1.134	6.817	551.9
223	270.00	.37000	830.00	.3610-01	.4400-01	.4960-01	.9247	.2527-02	.1839-02	.3800	2.313	540.5
223	270.00	.37500	831.00	.1829	.2264	.2574	.9247	.1312-01	.9325-02	1.814	11.02	552.7
223	270.00	.38000	832.00	.1580	.1946	.2204	.9247	.1124-01	.8057-02	1.603	9.764	548.2

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
223	270.00	.39000	833.00	.1098	.1343	.1513	.9247	.7716-02	.5600-02	1.149	7.098	542.0
223	270.00	.40000	834.00	.8110-01	.9870-01	.1109	.9247	.5656-02	.4136-02	.8660	5.377	537.8
223	270.00	.50000	835.00	.4870-01	.5910-01	.6630-01	.9247	.3381-02	.2480-02	.5240	3.331	535.9
223	270.00	.60000	836.00	.4680-01	.5730-01	.6470-01	.9247	.3296-02	.2387-02	.4870	3.251	543.2
223	270.00	.70000	837.00	.6260-01	.7710-01	.8740-01	.9247	.4454-02	.3193-02	.6350	4.466	548.4
223	270.00	.80000	838.00	.1024	.1260	.1426	.9247	.7271-02	.5222-02	1.043	6.478	547.5
223	270.00	.90000	839.00	.5980-01	.7380-01	.8380-01	.9247	.4271-02	.3048-02	.5990	3.821	550.7
236	270.00	.92600	2141.0	.4650-01	.5730-01	.6490-01	.9247	.3318-02	.2378-02	.4750	3.244	550.9
236	270.00	.93000	2146.0	.5110-01	.6320-01	.7180-01	.9247	.3669-02	.2612-02	.5130	3.608	554.2
236	270.00	.93500	2150.0	.5410-01	.6690-01	.7590-01	.9247	.3881-02	.2769-02	.5460	3.845	553.3
236	289.43	.92600	2140.0	.8560-01	.1053	.1188	.9254	.6073-02	.4375-02	.8770	6.123	550.2
236	289.43	.93000	2145.0	.9010-01	.1116	.1264	.9254	.6461-02	.4609-02	.9000	6.392	555.2
223	292.50	.23000	840.00	.7960-01	.9800-01	.1099	.9266	.5603-02	.4058-02	.8070	6.501	548.3
223	292.50	.25000	841.00	.5260-01	.6450-01	.7260-01	.9254	.3699-02	.2681-02	.5430	4.211	544.8
223	292.50	.35000	845.00	.2452	.3147	.3657	.9254	.1864-01	.1250-01	2.114	12.76	578.1
223	292.50	.37000	846.00	.1636	.2026	.2295	.9254	.1170-01	.8342-02	1.619	9.943	553.2
223	292.50	.40000	847.00	.1276	.1563	.1757	.9254	.8955-02	.6505-02	1.325	8.268	543.6
223	292.50	.45000	848.00	.8690-01	.1058	.1183	.9254	.6033-02	.4432-02	.9300	5.875	537.3
223	292.50	.60000	851.00	.7140-01	.8810-01	.9950-01	.9254	.5072-02	.3640-02	.7180	4.805	549.9
223	292.50	.65000	852.00	.9670-01	.1204	.1369	.9254	.6978-02	.4931-02	.9370	6.339	557.3
223	292.50	.70000	853.00	.1758	.2225	.2560	.9254	.1305-01	.8961-02	1.593	11.06	569.4
223	292.50	.75000	854.00	.1355	.1686	.1917	.9254	.9771-02	.6907-02	1.313	8.471	557.1
223	292.50	.80000	855.00	.1405	.1735	.1962	.9254	.1000-01	.7161-02	1.404	9.110	551.2
236	292.50	.82000	2129.0	.1398	.1732	.1964	.9254	.1004-01	.7147-02	1.388	8.469	556.3
236	292.50	.83000	2130.0	.1279	.1586	.1799	.9254	.9196-02	.6538-02	1.266	7.786	556.9
236	292.50	.85000	2132.0	.1380	.1711	.1940	.9254	.9919-02	.7056-02	1.368	8.459	556.7
236	292.50	.86000	2133.0	.1336	.1656	.1877	.9254	.9596-02	.6830-02	1.326	8.157	556.3
236	292.50	.87000	2134.0	.1390	.1722	.1951	.9254	.9976-02	.7105-02	1.382	8.551	556.0
236	292.50	.88000	2135.0	.1320	.1636	.1855	.9254	.9482-02	.6748-02	1.310	8.104	556.4
236	292.50	.89000	2136.0	.1265	.1563	.1767	.9254	.9034-02	.6468-02	1.275	7.918	553.5
223	292.50	.90000	856.00	.1044	.1285	.1451	.9254	.7395-02	.5321-02	1.057	6.852	548.5
236	292.50	.92600	2138.0	.8680-01	.1066	.1201	.9254	.6139-02	.4438-02	.8970	6.267	548.5
236	292.50	.93000	2139.0	.9420-01	.1160	.1309	.9254	.6695-02	.4814-02	.9590	6.870	551.2
236	301.50	.82000	2116.0	.1107	.1365	.1541	.9255	.7880-02	.5662-02	1.126	6.883	551.7
236	301.50	.83000	2117.0	.1117	.1377	.1554	.9255	.7943-02	.5713-02	1.139	6.925	551.2
236	301.50	.83500	2118.0	.1121	.1381	.1559	.9255	.7973-02	.5729-02	1.139	6.868	551.8
236	301.50	.84000	2119.0	.1128	.1389	.1568	.9255	.8016-02	.5767-02	1.150	6.993	551.1
236	301.50	.85000	2120.0	.1130	.1392	.1570	.9255	.8027-02	.5779-02	1.154	7.041	550.8
236	301.50	.86000	2021.0	.1211	.1496	.1691	.9255	.8644-02	.6194-02	1.223	7.490	553.1
236	301.50	.87000	2122.0	.1133	.1397	.1577	.9255	.8062-02	.5795-02	1.153	7.047	551.6
236	301.50	.88000	2123.0	.1166	.1437	.1623	.9255	.8297-02	.5961-02	1.184	7.280	551.9
236	301.50	.89000	2124.0	.1081	.1330	.1498	.9255	.7662-02	.5529-02	1.111	6.896	549.6
236	301.50	.90000	2125.0	.9920-01	.1215	.1365	.9255	.6978-02	.5073-02	1.039	6.517	545.7

IH72, OTS CLEAN, EXTERNAL TANK HI/HREF (RVZT34)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
236	301.50	.92600	2127.0	.1066	.1309	.1474	.9255	.7534-02	.5448-02	1.101	6.895	548.5
236	301.50	.93500	2128.0	.9910-01	.1217	.1371	.9255	.7011-02	.5065-02	1.021	6.877	548.9
236	305.40	.83000	2114.0	.1001	.1230	.1386	.9254	.7086-02	.5119-02	1.032	6.283	548.9
236	305.40	.83500	2115.0	.9790-01	.1203	.1357	.9254	.6937-02	.5003-02	1.005	6.164	549.8
223	305.40	.84000	857.00	.1009	.1232	.1383	.9254	.7049-02	.5143-02	1.060	6.571	541.1
234	305.40	.85000	858.00	.9550-01	.1180	.1335	.9254	.6828-02	.4883-02	.9610	5.949	554.2
234	305.40	.86000	859.00	.9610-01	.1189	.1346	.9254	.6880-02	.4915-02	.9650	6.020	554.8
234	305.40	.87000	860.00	.9450-01	.1170	.1326	.9254	.6779-02	.4831-02	.9420	5.895	556.0
234	305.40	.88000	861.00	.9190-01	.1138	.1289	.9254	.6589-02	.4700-02	.9190	5.748	555.6
234	305.40	.89000	862.00	.9220-01	.1142	.1294	.9254	.6617-02	.4717-02	.9210	5.793	555.8
234	305.40	.90000	863.00	.9100-01	.1126	.1274	.9254	.6513-02	.4655-02	.9150	5.791	554.6
234	305.40	.91000	864.00	.6720-01	.8260-01	.9300-01	.9254	.4758-02	.3437-02	.6940	5.038	549.1
234	305.40	.92600	865.00	.8520-01	.1053	.1191	.9254	.6090-02	.4355-02	.8570	6.186	554.3
234	309.30	.80000	866.00	.1077	.1329	.1502	.9253	.7679-02	.5507-02	1.092	6.844	552.7
234	309.30	.81000	867.00	.1085	.1340	.1516	.9253	.7754-02	.5547-02	1.093	6.806	554.0
234	309.30	.83000	869.00	.7370-01	.9050-01	.1019	.9253	.5210-02	.3770-02	.7650	4.791	548.1
234	315.00	.50000-01	871.00	.4349	.5451	.4893	.9725	.2502-01	.2224-01	4.131	26.16	565.3
234	315.00	.60000-01	872.00	.4005	.5009	.4576	.9689	.2340-01	.2048-01	3.835	25.26	563.7
223	315.00	.70000-01	873.00	.3891	.4788	.4469	.9655	.2278-01	.1984-01	3.959	26.92	547.7
223	315.00	.15000	876.00	.1933	.2346	.2435	.9415	.1242-01	.9853-02	2.088	15.37	535.3
223	315.00	.20000	877.00	.1151	.1386	.1503	.9309	.7664-02	.5870-02	1.296	8.824	526.5
223	315.00	.35000	878.00	.1020	.1249	.1405	.9252	.7161-02	.5199-02	1.060	6.601	543.3
223	315.00	.55000	881.00	.1135	.1430	.1641	.9252	.8366-02	.5787-02	1.049	6.920	565.9
223	315.00	.60000	882.00	.1773	.2206	.2509	.9252	.1279-01	.9039-02	1.722	11.52	556.7
223	315.00	.65000	883.00	.1338	.1648	.1863	.9252	.9496-02	.6822-02	1.354	9.230	548.8
223	315.00	.70000	884.00	.1058	.1303	.1471	.9252	.7499-02	.5394-02	1.074	7.628	548.1
223	315.00	.75000	885.00	.9320-01	.1144	.1289	.9252	.6569-02	.4753-02	.9610	6.059	545.1
223	315.00	.80000	886.00	.1069	.1304	.1464	.9252	.7462-02	.5452-02	1.131	7.134	539.8
223	315.00	.84000	887.00	.9730-01	.1183	.1325	.9252	.6754-02	.4959-02	1.043	6.586	537.0
234	315.00	.85000	888.00	.8860-01	.1091	.1233	.9252	.6306-02	.4532-02	.9060	5.727	551.2
234	315.00	.87000	890.00	.8140-01	.1004	.1135	.9252	.5804-02	.4164-02	.8280	5.250	552.1
234	315.00	.88000	891.00	.8490-01	.1048	.1185	.9252	.6062-02	.4341-02	.8600	5.480	553.0
234	315.00	.89000	892.00	.8650-01	.1067	.1207	.9252	.6172-02	.4424-02	.8780	5.693	552.6
234	315.00	.90000	893.00	.8730-01	.1077	.1219	.9252	.6232-02	.4462-02	.8830	5.796	553.1
234	315.00	.91000	894.00	.5820-01	.7120-01	.8020-01	.9252	.4099-02	.2977-02	.6110	4.460	545.7
234	315.00	.92600	895.00	.6730-01	.8300-01	.9390-01	.9252	.4799-02	.3444-02	.6850	4.969	552.0
234	322.30	.42000	897.00	.1244	.1568	.1803	.9249	.9222-02	.6360-02	1.156	7.351	569.2
234	322.30	.43500	898.00	.1225	.1555	.1799	.9249	.9197-02	.6265-02	1.108	6.832	574.1
234	322.30	.45000	899.00	.9840-01	.1250	.1447	.9249	.7399-02	.5030-02	.8860	5.718	574.8
234	322.30	.50000	900.00	.1497	.1905	.2208	.9249	.1129-01	.7655-02	1.342	8.809	575.7
234	322.30	.60000	901.00	.1481	.1854	.2122	.9249	.1085-01	.7572-02	1.413	9.304	564.4
234	322.30	.70000	902.00	.1053	.1305	.1482	.9249	.7580-02	.5387-02	1.050	7.133	556.1
236	324.45	.41000	2110.0	.8430-01	.1047	.1192	.9248	.6093-02	.4311-02	.8320	5.212	557.6

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
236	324.45	.92600	2164.0	.5970-01	.7270-01	.8160-01	.9248	.4175-02	.3051-02	.6390	4.558	541.0
236	326.85	.40500	2108.0	.7850-01	.9680-01	.1097	.9247	.5609-02	.4016-02	.7990	5.022	551.6
235	326.85	.44000	2021.0	.9710-01	.1216	.1395	.9247	.7131-02	.4963-02	.9220	5.811	564.3
235	326.85	.54600	2024.0	.9630-01	.1192	.1355	.9247	.6925-02	.4924-02	.9630	6.427	554.6
235	326.85	.58100	2025.0	.1693	.2123	.2436	.9247	.1246-01	.8654-02	1.602	11.11	565.1
235	326.85	.61600	2026.0	.1461	.1821	.2081	.9247	.1064-01	.7470-02	1.418	9.789	560.4
235	326.85	.65200	2027.0	.1203	.1489	.1692	.9247	.8648-02	.6152-02	1.204	8.341	554.4
235	326.85	.68600	2028.0	.1166	.1442	.1639	.9247	.8379-02	.5958-02	1.165	8.147	554.6
235	326.85	.72260	2029.0	.8270-01	.1015	.1147	.9247	.5863-02	.4228-02	.8570	5.975	547.5
235	326.85	.75790	2030.0	.7670-01	.9360-01	.1054	.9247	.5387-02	.3919-02	.8130	5.206	542.8
235	326.85	.79310	2031.0	.1064	.1306	.1475	.9247	.7542-02	.5439-02	1.102	6.904	547.6
235	326.85	.82830	2032.0	.1043	.1278	.1442	.9247	.7372-02	.5332-02	1.089	6.885	546.0
235	326.85	.86350	2033.0	.9940-01	.1215	.1369	.9247	.6997-02	.5080-02	1.048	6.576	543.9
235	326.85	.90000	2034.0	.1127	.1381	.1559	.9247	.7970-02	.5764-02	1.177	7.315	546.0
236	326.85	.92600	2163.0	.6060-01	.7380-01	.8290-01	.9247	.4241-02	.3098-02	.6500	4.632	540.8
235	326.85	.93390	2035.0	.6930-01	.8470-01	.9540-01	.9247	.4878-02	.3541-02	.7300	4.899	544.0
236	330.20	.40000	2104.0	.9770-01	.1207	.1372	.9245	.7016-02	.4995-02	.9820	6.169	553.9
236	330.20	.40500	2105.0	.8200-01	.1013	.1151	.9245	.5884-02	.4191-02	.8250	5.183	553.7
236	330.20	.41000	2106.0	.7380-01	.9130-01	.1038	.9245	.5305-02	.3775-02	.7410	4.638	554.3
234	330.20	.42000	905.00	.7460-01	.9280-01	.1059	.9245	.5417-02	.3817-02	.7330	4.694	559.1
234	330.20	.43500	906.00	.8670-01	.1087	.1248	.9245	.6382-02	.4431-02	.8220	5.280	565.6
234	330.20	.45000	907.00	.1446	.1828	.2114	.9245	.1081-01	.7392-02	1.326	8.541	571.7
234	330.20	.50000	908.00	.2315	.2956	.3442	.9245	.1760-01	.1184-01	2.050	14.44	577.9
234	330.20	.60000	909.00	.1531	.1917	.2199	.9245	.1125-01	.7829-02	1.461	9.476	564.4
234	330.20	.70000	910.00	.1059	.1313	.1497	.9245	.7652-02	.5415-02	1.050	7.043	557.1
234	330.20	.80000	911.00	.7300-01	.8960-01	.1014	.9245	.5183-02	.3733-02	.7560	4.845	548.4
234	330.20	.87000	912.00	.1490-01	.1810-01	.2030-01	.9245	.1038-02	.7641-03	.1640	1.056	536.0
236	330.20	.92600	2162.0	.5940-01	.7240-01	.8130-01	.9245	.4159-02	.3039-02	.6390	4.542	540.3
236	334.98	.92600	2161.0	.5930-01	.7210-01	.8120-01	.9243	.4154-02	.3030-02	.6360	4.507	540.6
234	334.98	.93500	913.00	.3180-01	.3850-01	.4330-01	.9242	.2214-02	.1625-02	.3480	2.543	536.9
234	337.50	.40000-01	915.00	.4944	.6193	.5561	.9725	.2843-01	.2528-01	4.706	29.56	564.8
234	337.50	.50000-01	916.00	.4412	.5511	.5038	.9688	.2576-01	.2256-01	4.245	27.16	562.8
234	337.50	.70000-01	918.00	.1417	.1698	.1622	.9618	.8295-02	.7248-02	1.648	11.59	523.7
234	337.50	.80000-01	919.00	.3385	.4182	.4022	.9585	.2057-01	.1731-01	3.409	23.18	554.1
234	337.50	.10000+00	920.00	.2742	.3359	.3327	.9522	.1701-01	.1402-01	2.865	19.14	546.7
234	337.50	.15000	921.00	.1712	.2091	.2201	.9387	.1125-01	.8753-02	1.813	13.16	543.9
234	337.50	.20000	922.00	.1050	.1275	.1401	.9290	.7166-02	.5368-02	1.141	7.633	538.4
234	337.50	.42000	923.00	.1282	.1608	.1852	.9241	.9471-02	.6557-02	1.215	7.851	565.7
236	337.50	.42500	2167.0	.9970-01	.1240	.1419	.9241	.7255-02	.5098-02	.9760	6.256	559.1
236	337.50	.43000	2172.0	.8000-03	.1000-02	.1100-02	.9241	.5492-04	.4048-04	.9000-02	.5700-01	533.9
234	337.50	.43500	924.00	.8270-01	.1032	.1184	.9241	.6056-02	.4227-02	.7980	5.178	562.3
234	337.50	.85000	926.00	.9180-01	.1127	.1278	.9241	.6537-02	.4693-02	.9480	6.123	549.0
234	337.50	.86000	927.00	.9340-01	.1147	.1300	.9241	.6647-02	.4774-02	.9660	6.258	548.7

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN, EXTERNAL TANK HI/HREF

(RVZT34)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
234	337.50	.87000	928.00	.9130-01	.1121	.1270	.9241	.6496-02	.4670-02	.9470	6.153	548.3
234	337.50	.88000	929.00	.6040-01	.7330-01	.8230-01	.9241	.4210-02	.3090-02	.6620	4.351	536.9
234	337.50	.89000	930.00	.8900-01	.1096	.1245	.9241	.6364-02	.4551-02	.9100	5.978	551.0
234	337.50	.90000	931.00	.7700-01	.9470-01	.1074	.9241	.5494-02	.3938-02	.7920	5.332	549.8
234	337.50	.91000	932.00	.5080-01	.6210-01	.7020-01	.9241	.3592-02	.2600-02	.5360	3.930	544.6
223	337.50	.92600	933.00	.6140-01	.7460-01	.8400-01	.9241	.4283-02	.3130-02	.6590	4.829	536.7
223	343.12	.41500	934.00	.1082	.1338	.1527	.9238	.7783-02	.5518-02	1.080	6.986	551.6
223	343.12	.42000	935.00	.1227	.1524	.1746	.9238	.8902-02	.6254-02	1.197	7.796	555.8
223	343.12	.42500	936.00	.1787	.2243	.2590	.9238	.1320-01	.9109-02	1.672	10.88	563.6
223	343.12	.44500	939.00	.1695	.2123	.2446	.9238	.1247-01	.8644-02	1.604	10.57	561.6
223	343.12	.45000	940.00	.1729	.2169	.2503	.9238	.1276-01	.8815-02	1.624	10.69	563.0
223	343.12	.50000	941.00	.1371	.1732	.2008	.9238	.1024-01	.6991-02	1.256	8.428	567.6
223	343.12	.60000	942.00	.1441	.1787	.2045	.9238	.1042-01	.7346-02	1.416	9.096	554.4
223	343.12	.80000	944.00	.8750-01	.1067	.1205	.9238	.6142-02	.4463-02	.9300	6.091	538.9
236	345.56	.42500	2168.0	.1583	.1989	.2299	.9237	.1176-01	.8094-02	1.489	9.504	566.6
236	345.56	.92600	2160.0	.5620-01	.6820-01	.7680-01	.9238	.3928-02	.2874-02	.6120	4.346	537.4
223	348.00	.35000	945.00	.6880-01	.8340-01	.9390-01	.9235	.4790-02	.3508-02	.7490	4.781	533.6
223	348.00	.36000	946.00	.6550-01	.7950-01	.8970-01	.9235	.4571-02	.3338-02	.7070	4.522	535.3
223	348.00	.37000	947.00	.6710-01	.8140-01	.9180-01	.9235	.4681-02	.3420-02	.7260	4.653	535.0
234	348.00	.37500	948.00	.7130-01	.8770-01	.9980-01	.9235	.5103-02	.3647-02	.7340	4.673	549.7
234	348.00	.38000	949.00	.7220-01	.8890-01	.1013	.9235	.5181-02	.3691-02	.7370	4.730	551.2
234	348.00	.38500	950.00	.6820-01	.8400-01	.9580-01	.9235	.4899-02	.3486-02	.6950	4.468	551.8
234	348.00	.39000	951.00	.6400-01	.7890-01	.9000-01	.9235	.4604-02	.3273-02	.6510	4.208	552.2
234	348.00	.39500	952.00	.6180-01	.7630-01	.8720-01	.9235	.4457-02	.3162-02	.6250	3.983	553.3
234	348.00	.40000	953.00	.6980-01	.8630-01	.9870-01	.9235	.5045-02	.3567-02	.7000	4.533	554.9
234	348.00	.41000	955.00	.1096	.1372	.1584	.9235	.8099-02	.5602-02	1.044	6.753	564.6
234	348.00	.41500	956.00	.1095	.1368	.1577	.9235	.8061-02	.5601-02	1.055	6.846	562.7
234	348.00	.42000	957.00	.1445	.1824	.2118	.9235	.1083-01	.7391-02	1.338	8.680	570.0
234	348.00	.42500	958.00	.1282	.1614	.1871	.9235	.9567-02	.6557-02	1.198	7.775	568.4
234	348.00	.43000	959.00	.1925	.2453	.2870	.9235	.1467-01	.9842-02	1.717	11.07	576.5
234	348.00	.44000	960.00	.2211	.2815	.3293	.9235	.1684-01	.1130-01	1.977	12.78	576.1
234	348.00	.44500	961.00	.2009	.2568	.3011	.9235	.1540-01	.1027-01	1.774	11.46	578.4
234	348.00	.85000	968.00	.9010-01	.1105	.1256	.9235	.6422-02	.4606-02	.9360	6.068	547.8
234	348.00	.86000	969.00	.7720-01	.9470-01	.1078	.9235	.5511-02	.3945-02	.7980	5.185	548.8
235	348.00	.89000	972.00	.7560-01	.9230-01	.1045	.9235	.5343-02	.3864-02	.8010	5.329	542.9
235	348.00	.91000	974.00	.4410-01	.5350-01	.6020-01	.9235	.3079-02	.2256-02	.4850	3.555	535.4
236	354.00	.42500	2169.0	.2085	.2650	.3102	.9232	.1586-01	.1066-01	1.876	11.93	574.6
236	354.00	.43000	2174.0	.1931	.2456	.2875	.9232	.1470-01	.9874-02	1.734	11.03	574.9
236	354.00	.43500	2177.0	.1783	.2257	.2631	.9232	.1345-01	.9118-02	1.632	10.39	571.6
236	354.00	.44000	2179.0	.1671	.2115	.2467	.9232	.1261-01	.8544-02	1.527	9.724	571.8
236	355.16	.92600	2158.0	.4410-01	.5350-01	.6050-01	.9231	.3094-02	.2255-02	.4800	3.461	537.7

EXTERNAL TANK

PARAMETRIC DATA

ALPHA = .0000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
216	-.1000-01	-8.900	4.020	72.20	750.0	177.3	.4630	5.239	2623.	.2192-03	.1427-06	4.028
217	-.1000-01	-9.000	4.020	72.20	751.0	177.3	.4630	5.240	2623.	.2191-03	.1428-06	4.026
218	-.1000-01	-8.900	4.020	72.20	750.0	177.3	.4630	5.235	2623.	.2190-03	.1427-06	4.025
228	-.1000-01	-9.000	4.020	72.10	747.0	176.5	.4630	5.233	2617.	.2199-03	.1421-06	4.051
229	-.1000-01	-9.000	4.020	72.30	747.0	176.5	.4640	5.247	2617.	.2205-03	.1421-06	4.060
230	-.1000-01	-8.900	4.020	72.20	747.0	176.5	.4630	5.236	2617.	.2201-03	.1421-06	4.053

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
216	.5098-01	.1145-01
217	.5099-01	.1146-01
218	.5097-01	.1146-01
228	.5092-01	.1143-01
229	.5100-01	.1141-01
230	.5094-01	.1142-01

TEST DATA

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
217	.00000	.25000-01	2187.0	.3943	.5365	.4934	.9621	.2516-01	.2011-01	2.847	19.49	608.9
217	.00000	.30000-01	2188.0	.3705	.4985	.4604	.9620	.2348-01	.1889-01	2.760	19.07	604.4
216	.00000	.40000-01	600.00	.4434	.5715	.5453	.9583	.2780-01	.2260-01	3.782	23.89	582.8
216	.00000	.50000-01	601.00	.3355	.4346	.4225	.9548	.2154-01	.1711-01	2.815	17.80	585.6
216	.00000	.70000-01	603.00	.2619	.3344	.3374	.9484	.1720-01	.1335-01	2.309	15.52	577.2
216	.00000	.80000-01	604.00	.2686	.3412	.3499	.9454	.1784-01	.1369-01	2.413	15.49	573.9
216	.00000	.15000	606.00	.1093	.1343	.1481	.9296	.7550-02	.5571-02	1.123	8.156	548.6
216	.00000	.20000	607.00	.6260-01	.7610-01	.8600-01	.9235	.4382-02	.3192-02	.6740	4.414	539.0
216	.00000	.21000	608.00	.5430-01	.6670-01	.7610-01	.9229	.3878-02	.2767-02	.5590	3.861	548.1
216	.00000	.22000	609.00	.4340-01	.5310-01	.6060-01	.9224	.3089-02	.2213-02	.4540	3.383	544.9
216	.00000	.30000	610.00	.3850-01	.4690-01	.5340-01	.9220	.2721-02	.1963-02	.4120	2.832	540.1
216	.00000	.35000	611.00	.3760-01	.4560-01	.5180-01	.9220	.2642-02	.1918-02	.4100	2.743	536.6

IH72, OTS CLEAN, EXTERNAL TANK HI/HREF (RVZT35)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
216	.00000	.36000	612.00	.3770-01	.4570-01	.5190-01	.9220	.2646-02	.1922-02	.4110	2.774	536.5
216	.00000	.37500	614.00	.3980-01	.4830-01	.5500-01	.9220	.2804-02	.2027-02	.4280	2.886	539.1
218	.00000	.38500	616.00	.4470-01	.5470-01	.6250-01	.9220	.3187-02	.2279-02	.4690	3.152	544.7
218	.00000	.39500	618.00	.5900-01	.7280-01	.8370-01	.9220	.4263-02	.3009-02	.5980	4.024	551.4
218	.00000	.40000	619.00	.6130-01	.7620-01	.8830-01	.9220	.4498-02	.3126-02	.5990	3.994	558.4
218	.00000	.40500	620.00	.6890-01	.8560-01	.9900-01	.9220	.5048-02	.3509-02	.6740	4.501	558.3
218	.00000	.41500	622.00	.1334	.1703	.2016	.9220	.1027-01	.6799-02	1.176	7.762	577.2
218	.00000	.43000	625.00	.1504	.1907	.2244	.9220	.1144-01	.7664-02	1.360	9.020	572.8
218	.00000	.44000	626.00	.1376	.1733	.2028	.9220	.1033-01	.7013-02	1.277	8.490	568.2
218	.00000	.44500	627.00	.1296	.1633	.1911	.9220	.9742-02	.6606-02	1.201	8.057	568.4
218	.00000	.45000	628.00	.1186	.1487	.1734	.9220	.8836-02	.6044-02	1.119	7.523	565.0
218	.00000	.45500	629.00	.1091	.1366	.1590	.9220	.8102-02	.5562-02	1.038	7.091	563.5
216	.00000	.46000	630.00	.1042	.1314	.1539	.9220	.7845-02	.5315-02	.9640	6.409	568.7
216	.00000	.47000	631.00	.9260-01	.1159	.1349	.9220	.6879-02	.4721-02	.8800	5.868	563.7
216	.00000	.48000	632.00	.8360-01	.1043	.1211	.9220	.6172-02	.4260-02	.8040	5.399	561.3
216	.00000	.49000	633.00	.7410-01	.9180-01	.1060	.9220	.5402-02	.3776-02	.7340	4.988	555.7
216	.00000	.50000	634.00	.7210-01	.8920-01	.1029	.9220	.5245-02	.3675-02	.7180	5.006	554.7
216	.00000	.55000	635.00	.7780-01	.9600-01	.1105	.9220	.5631-02	.3968-02	.7860	5.206	552.1
216	.00000	.60000	636.00	.8310-01	.1026	.1181	.9220	.6022-02	.4239-02	.8380	5.387	552.5
216	.00000	.65000	637.00	.8110-01	.1001	.1152	.9220	.5871-02	.4135-02	.8180	5.277	552.3
216	.00000	.70000	638.00	.7570-01	.9330-01	.1073	.9220	.5468-02	.3860-02	.7680	5.247	551.1
216	.00000	.75000	639.00	.4370-01	.5330-01	.6080-01	.9220	.3098-02	.2230-02	.4650	3.009	541.4
216	.00000	.80000	640.00	.6110-01	.7470-01	.8530-01	.9220	.4350-02	.3117-02	.6440	4.040	543.7
216	.00000	.85000	641.00	.5710-01	.6960-01	.7930-01	.9220	.4045-02	.2911-02	.6080	3.852	541.4
216	.00000	.87000	643.00	.5250-01	.6400-01	.7290-01	.9220	.3718-02	.2676-02	.5590	3.612	541.4
216	.00000	.88000	644.00	.5280-01	.6440-01	.7340-01	.9220	.3742-02	.2694-02	.5630	3.672	541.2
218	.00000	.89000	645.00	.4900-01	.6010-01	.6880-01	.9220	.3506-02	.2496-02	.5070	3.338	547.0
218	.00000	.95000	649.00	.1540-01	.1860-01	.2100-01	.9220	.1071-02	.7871-03	.1740	1.279	529.4
230	5.6250	.42500	2170.0	.1272	.1623	.1920	.9220	.9779-02	.6479-02	1.119	7.177	574.2
218	11.250	.35000	650.00	.3110-01	.3790-01	.4320-01	.9220	.2199-02	.1587-02	.3330	2.248	540.1
218	11.250	.37000	652.00	.3590-01	.4380-01	.5000-01	.9220	.2550-02	.1831-02	.3800	2.560	542.6
218	11.250	.37500	653.00	.4470-01	.5470-01	.6260-01	.9220	.3191-02	.2276-02	.4650	3.133	546.1
218	11.250	.38000	654.00	.5540-01	.6810-01	.7810-01	.9220	.3980-02	.2824-02	.5690	3.829	548.9
218	11.250	.40500	659.00	.5900-01	.7340-01	.8500-01	.9220	.4331-02	.3008-02	.5760	3.873	558.7
218	11.250	.41500	661.00	.8210-01	.1028	.1196	.9220	.6098-02	.4185-02	.7810	5.204	563.7
218	11.250	.42000	662.00	.1000+00	.1260	.1475	.9220	.7517-02	.5094-02	.9250	6.168	568.6
218	11.250	.42500	663.00	.9950-01	.1252	.1464	.9220	.7461-02	.5069-02	.9250	6.193	567.7
218	11.250	.43000	664.00	.9830-01	.1231	.1435	.9220	.7314-02	.5008-02	.9300	6.289	564.6
218	11.250	.44000	665.00	.8830-01	.1101	.1277	.9220	.6508-02	.4502-02	.8550	5.759	560.4
218	11.250	.45000	666.00	.7830-01	.9730-01	.1125	.9220	.5735-02	.3993-02	.7690	5.189	557.6
218	11.250	.45500	667.00	.6830-01	.8470-01	.9780-01	.9220	.4987-02	.3481-02	.6750	4.555	556.4
218	11.250	.46000	668.00	.6620-01	.8190-01	.9440-01	.9220	.4814-02	.3373-02	.6600	4.469	554.7
218	11.250	.47000	669.00	.5720-01	.7060-01	.8130-01	.9220	.4145-02	.2913-02	.5740	3.902	553.3

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
218	11.250	.48000	670.00	.5680-01	.7020-01	.8080-01	.9220	.4117-02	.2897-02	.5720	3.895	552.7
218	11.250	.49000	671.00	.4820-01	.5950-01	.6850-01	.9220	.3491-02	.2457-02	.4860	3.295	552.6
218	11.250	.50000	672.00	.4800-01	.5920-01	.6810-01	.9220	.3471-02	.2445-02	.4840	3.357	552.2
218	11.250	.70000	674.00	.3800-01	.4660-01	.5340-01	.9220	.2721-02	.1938-02	.3940	2.684	546.7
218	11.250	.85000	676.00	.3630-01	.4390-01	.4980-01	.9220	.2536-02	.1849-02	.4000	2.556	534.2
218	11.250	.87000	678.00	.3530-01	.4280-01	.4860-01	.9220	.2475-02	.1801-02	.3870	2.511	535.2
218	11.250	.88000	679.00	.3370-01	.4100-01	.4650-01	.9220	.2371-02	.1720-02	.3660	2.401	537.3
218	11.250	.90000	681.00	.2420-01	.2930-01	.3330-01	.9220	.1695-02	.1235-02	.2670	1.808	534.5
218	11.250	.91000	682.00	.1220-01	.1470-01	.1660-01	.9220	.8443-03	.6222-03	.1380	1.019	527.8
218	11.250	.92600	683.00	.1970-01	.2380-01	.2690-01	.9220	.1372-02	.1002-02	.2180	1.607	532.8
218	11.250	.95000	684.00	.7700-02	.9300-02	.1050-01	.9220	.5348-03	.3924-03	.8600-01	.6280	530.4
218	17.000	.33000	685.00	.3090-01	.3770-01	.4290-01	.9220	.2188-02	.1575-02	.3290	2.220	541.2
218	17.000	.35000	687.00	.3050-01	.3720-01	.4240-01	.9220	.2159-02	.1556-02	.3260	2.200	540.6
230	17.000	.35500	2102.0	.3240-01	.3950-01	.4500-01	.9220	.2291-02	.1649-02	.3430	2.254	538.8
218	17.000	.36000	688.00	.3250-01	.3960-01	.4520-01	.9220	.2301-02	.1655-02	.3450	2.324	541.8
218	17.000	.37000	689.00	.4690-01	.5760-01	.6600-01	.9220	.3365-02	.2390-02	.4830	3.242	548.2
218	17.000	.37500	690.00	.5660-01	.6960-01	.7990-01	.9220	.4074-02	.2885-02	.5780	3.892	549.8
230	17.000	.42500	2171.0	.8900-01	.1110	.1289	.9220	.6564-02	.4536-02	.8550	5.451	558.3
230	17.000	.43000	2176.0	.9120-01	.1137	.1319	.9220	.6717-02	.4648-02	.8790	5.688	557.7
216	17.000	.50000	691.00	.4700-01	.5700-01	.6480-01	.9220	.3303-02	.2395-02	.5100	3.444	537.2
216	17.000	.60000	692.00	.3090-01	.3730-01	.4220-01	.9220	.2153-02	.1576-02	.3440	2.237	531.7
216	17.000	.70000	693.00	.2830-01	.3420-01	.3870-01	.9220	.1972-02	.1445-02	.3160	2.161	531.3
216	17.000	.80000	694.00	.2830-01	.3390-01	.3820-01	.9220	.1946-02	.1441-02	.3250	2.063	524.8
216	17.000	.87000	695.00	.2970-01	.3560-01	.4010-01	.9220	.2045-02	.1514-02	.3410	2.201	524.7
230	20.980	.35500	2098.0	.2920-01	.3550-01	.4040-01	.9220	.2057-02	.1487-02	.3130	2.087	536.6
230	20.980	.36000	2099.0	.3410-01	.4160-01	.4750-01	.9220	.2420-02	.1736-02	.3580	2.363	540.7
230	20.980	.36500	2100.0	.3760-01	.4590-01	.5250-01	.9220	.2673-02	.1914-02	.3930	2.591	541.7
230	23.070	.35500	2094.0	.3130-01	.3810-01	.4350-01	.9220	.2215-02	.1594-02	.3310	2.186	539.3
230	23.070	.36000	2095.0	.3750-01	.4590-01	.5240-01	.9220	.2670-02	.1909-02	.3900	2.576	542.3
230	23.070	.36500	2096.0	.4410-01	.5410-01	.6190-01	.9220	.3154-02	.2248-02	.4560	3.002	544.2
230	23.070	.37000	2097.0	-.2270-01	-.1780-01	-.1590-01	.9220	-.8107-03	-.1154-02	.1590	.8920	884.3
229	23.070	.43500	2000.0	.8550-01	.1059	.1223	.9220	.6236-02	.4358-02	.8430	5.388	553.6
229	23.070	.56890	2001.0	.3210-01	.3910-01	.4450-01	.9220	.2269-02	.1637-02	.3420	2.351	538.1
229	23.070	.70270	2002.0	.2270-01	.2750-01	.3110-01	.9220	.1588-02	.1157-02	.2480	1.782	532.5
229	23.070	.83500	2003.0	.3240-01	.3890-01	.4390-01	.9220	.2240-02	.1652-02	.3660	2.355	525.2
229	23.070	.90000	2004.0	.2570-01	.3090-01	.3490-01	.9220	.1782-02	.1310-02	.2880	1.955	527.2
230	23.070	.92600	2154.0	.1170-01	.1420-01	.1610-01	.9220	.8201-03	.5984-03	.1290	.9270	531.4
216	29.800	.70000-01	700.00	.2130	.2683	.2799	.9420	.1427-01	.1086-01	1.975	13.21	568.3
216	29.800	.10000+00	701.00	.1693	.2085	.2246	.9346	.1145-01	.8631-02	1.721	10.95	550.7
216	29.800	.15000	702.00	.7670-01	.9310-01	.1038	.9260	.5290-02	.3908-02	.8300	5.967	537.7
216	29.800	.20000	703.00	.3750-01	.4520-01	.5100-01	.9222	.2600-02	.1912-02	.4210	2.831	529.7
216	29.800	.30000	704.00	.2190-01	.2650-01	.3010-01	.9220	.1532-02	.1118-02	.2420	1.727	533.6
216	29.800	.35000	705.00	.3950-01	.4830-01	.5520-01	.9220	.2813-02	.2014-02	.4150	2.843	544.2

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
230	29.800	.35500	2090.0	.4210-01	.5160-01	.5920-01	.9220	.3013-02	.2142-02	.4320	2.845	545.3
230	29.800	.36500	2092.0	.4710-01	.5770-01	.6610-01	.9220	.3368-02	.2398-02	.4850	3.188	544.5
218	29.800	.50000	707.00	.4450-01	.5450-01	.6230-01	.9220	.3175-02	.2267-02	.4640	3.179	545.5
218	29.800	.60000	708.00	.2100-01	.2540-01	.2870-01	.9220	.1463-02	.1073-02	.2350	1.513	530.8
218	29.800	.70000	709.00	.1420-01	.1710-01	.1940-01	.9220	.9881-03	.7233-03	.1580	1.014	531.9
218	29.800	.80000	710.00	.3360-01	.4050-01	.4570-01	.9220	.2327-02	.1714-02	.3810	2.397	528.0
230	31.430	.44000	2166.0	.8930-01	.1111	.1286	.9220	.6552-02	.4551-02	.8680	5.737	556.1
229	31.430	.47600	2005.0	.6960-01	.8550-01	.9800-01	.9220	.4999-02	.3551-02	.7140	4.744	545.9
229	31.430	.51100	2006.0	.4080-01	.4980-01	.5680-01	.9220	.2898-02	.2078-02	.4280	2.941	540.9
229	31.430	.54600	2007.0	.2010-01	.2430-01	.2750-01	.9220	.1404-02	.1027-02	.2230	1.577	530.1
229	31.430	.61600	2009.0	.1670-01	.2010-01	.2260-01	.9220	.1152-02	.8518-03	.1900	1.319	523.5
229	31.430	.65000	2010.0	.1430-01	.1720-01	.1930-01	.9220	.9863-03	.7302-03	.1640	1.153	522.7
229	31.430	.68600	2014.0	.1200-01	.1440-01	.1630-01	.9220	.8309-03	.6099-03	.1340	.9410	527.9
229	31.430	.72050	2015.0	.7300-02	.8700-02	.9900-02	.9220	.5038-03	.3700-03	.8100-01	.6080	527.7
229	31.430	.79040	2017.0	.2930-01	.3530-01	.3980-01	.9220	.2030-02	.1493-02	.3280	2.096	527.1
229	31.430	.86000	2019.0	.7300-02	.8800-02	.1000-01	.9220	.5083-03	.3700-03	.7900-01	.5150	532.8
229	31.430	.89520	2020.0	.3350-01	.4040-01	.4550-01	.9220	.2322-02	.1711-02	.3780	2.487	525.9
230	31.430	.92600	2153.0	.1660-01	.2000-01	.2270-01	.9220	.1154-02	.8455-03	.1840	1.355	529.1
229	33.750	.25000	2079.0	.1550-01	.1870-01	.2110-01	.9220	.1078-02	.7879-03	.1710	1.414	530.3
229	33.750	.30000	2080.0	.2280-01	.2760-01	.3140-01	.9220	.1599-02	.1161-02	.2470	1.634	534.5
229	33.750	.37500	2081.0	.5130-01	.6260-01	.7130-01	.9220	.3638-02	.2616-02	.5430	3.619	539.5
229	33.750	.40000	2082.0	.7250-01	.8900-01	.1021	.9220	.5205-02	.3698-02	.7450	4.947	545.7
229	33.750	.45000	2084.0	.8140-01	.9920-01	.1131	.9220	.5769-02	.4150-02	.8610	5.742	539.5
229	33.750	.60000	2085.0	.1950-01	.2350-01	.2650-01	.9220	.1350-02	.9936-03	.2190	1.471	526.5
230	33.750	.92600	2152.0	.1530-01	.1850-01	.2090-01	.9220	.1063-02	.7787-03	.1690	1.247	529.3
229	36.320	.25000	2066.0	.6840-01	.8370-01	.9570-01	.9220	.4878-02	.3490-02	.7150	4.757	542.3
229	36.320	.30000	2067.0	.2090-01	.2540-01	.2880-01	.9220	.1469-02	.1065-02	.2260	1.497	534.8
229	36.320	.35000	2069.0	.4710-01	.5750-01	.6560-01	.9220	.3344-02	.2401-02	.4960	3.304	540.5
229	36.320	.37500	2070.0	.5240-01	.6400-01	.7310-01	.9220	.3728-02	.2673-02	.5510	3.667	541.1
229	36.320	.40000	2071.0	.6080-01	.7420-01	.8460-01	.9220	.4315-02	.3100-02	.6410	4.274	540.1
229	36.320	.42000	2072.0	.7940-01	.9750-01	.1117	.9220	.5696-02	.4048-02	.8150	5.417	545.7
229	36.320	.42500	2073.0	.8540-01	.1052	.1209	.9220	.6166-02	.4353-02	.8620	5.721	548.9
229	36.320	.43000	2074.0	.8560-01	.1054	.1212	.9220	.6180-02	.4365-02	.8660	5.745	548.7
229	36.320	.43500	2075.0	.8540-01	.1055	.1215	.9220	.6194-02	.4357-02	.8560	5.673	550.6
229	36.320	.45000	2076.0	.7830-01	.9510-01	.1081	.9220	.5511-02	.3995-02	.8460	5.651	535.2
229	36.320	.60000	2077.0	.1690-01	.2030-01	.2290-01	.9220	.1168-02	.8610-03	.1910	1.294	525.2
229	36.320	.65000	2078.0	.1250-01	.1500-01	.1690-01	.9220	.8607-03	.6350-03	.1410	.9770	524.8
218	37.700	.50000-01	715.00	.2909	.3722	.3795	.9465	.1934-01	.1483-01	2.546	16.35	578.5
218	37.700	.70000-01	716.00	.2121	.2663	.2796	.9407	.1425-01	.1081-01	1.995	13.48	565.7
218	37.700	.10000+00	717.00	.1529	.1878	.2031	.9334	.1035-01	.7795-02	1.576	10.22	548.0
218	37.700	.15000	718.00	.7150-01	.8670-01	.9680-01	.9253	.4934-02	.3643-02	.7800	5.735	536.2
218	37.700	.20000	719.00	.3320-01	.3990-01	.4510-01	.9221	.2297-02	.1690-02	.3740	2.547	528.8
218	37.700	.30000	720.00	.1760-01	.2130-01	.2420-01	.9220	.1234-02	.8956-03	.1910	1.373	536.9

IH72. AEDC V41A-R2A. INTEGRATED VEHICLE HEATING RATES

IH72. OTS CLEAN. EXTERNAL TANK HI/HREF

(RVZT35)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
216	37.700	.35000	721.00	.4810-01	.5880-01	.6710-01	.9220	.3419-02	.2452-02	.5070	3.522	543.3
216	37.700	.50000	723.00	.4700-01	.5670-01	.6410-01	.9220	.3267-02	.2396-02	.5260	3.665	530.6
216	37.700	.60000	724.00	.1570-01	.1890-01	.2130-01	.9220	.1085-02	.7988-03	.1770	1.144	528.3
216	37.700	.70000	725.00	.1580-01	.1900-01	.2150-01	.9220	.1094-02	.8080-03	.1810	1.161	526.5
216	37.700	.80000	726.00	.1990-01	.2390-01	.2690-01	.9220	.1371-02	.1017-02	.2300	1.462	524.0
216	37.700	.87000	727.00	.2970-01	.3560-01	.4010-01	.9220	.2043-02	.1515-02	.3430	2.219	523.7
216	37.700	.92600	728.00	.1410-01	.1690-01	.1890-01	.9220	.9645-03	.7199-03	.1660	1.224	519.4
217	39.000	.10000-01	993.00	.4117	.5597	.5436	.9541	.2772-01	.2099-01	2.980	21.01	608.6
217	39.000	.25000-01	994.00	.3040	.3945	.3872	.9532	.1974-01	.1550-01	2.536	16.91	586.9
229	45.000	.25000	2036.0	.9500-02	.1150-01	.1290-01	.9220	.6601-03	.4845-03	.1060	.8660	528.1
229	45.000	.30000	2037.0	.3000-03	.4000-03	.4000-03	.9220	.2113-04	.1531-04	.3000-02	.2300-01	535.3
229	45.000	.32500	2038.0	.4260-01	.5190-01	.5920-01	.9220	.3020-02	.2171-02	.4500	3.095	539.6
229	45.000	.35000	2039.0	.5680-01	.6940-01	.7920-01	.9220	.4037-02	.2897-02	.5980	4.040	540.8
229	45.000	.37500	2040.0	.4130-01	.5030-01	.5710-01	.9220	.2914-02	.2109-02	.4440	3.012	536.3
229	45.000	.40000	2041.0	.2660-01	.3220-01	.3660-01	.9220	.1865-02	.1358-02	.2910	1.975	532.7
229	45.000	.43000	2044.0	.6090-01	.7440-01	.8490-01	.9220	.4329-02	.3105-02	.6400	4.325	541.0
229	45.000	.44000	2046.0	.8510-01	.1048	.1203	.9220	.6136-02	.4339-02	.8630	5.817	548.1
229	45.000	.45000	2047.0	.9260-01	.1144	.1319	.9220	.6725-02	.4721-02	.9230	6.246	551.5
229	45.000	.47000	2048.0	.8340-01	.1030	.1185	.9220	.6044-02	.4253-02	.8360	5.712	550.5
229	45.000	.55000	2049.0	.3480-01	.4230-01	.4800-01	.9220	.2450-02	.1776-02	.3760	2.597	535.3
229	45.000	.60000	2050.0	.2650-01	.3440-01	.3900-01	.9220	.1987-02	.1453-02	.3150	2.143	530.2
229	45.000	.65000	2051.0	.2020-01	.2430-01	.2750-01	.9220	.1403-02	.1029-02	.2250	1.514	528.3
229	45.000	.75000	2052.0	.1210-01	.1460-01	.1650-01	.9220	.8404-03	.6180-03	.1360	.8730	526.9
229	45.000	.80000	2053.0	.1330-01	.1600-01	.1800-01	.9220	.9180-03	.6796-03	.1530	.9700	522.6
229	45.000	.83000	2054.0	.1370-01	.1640-01	.1850-01	.9220	.9413-03	.6981-03	.1570	1.000	521.5
229	45.000	.84000	2055.0	.1430-01	.1710-01	.1920-01	.9220	.9807-03	.7279-03	.1650	1.045	521.0
229	45.000	.85000	2056.0	.1680-01	.2010-01	.2260-01	.9220	.1153-02	.8557-03	.1930	1.244	521.3
229	45.000	.86000	2057.0	.1740-01	.2090-01	.2350-01	.9220	.1198-02	.8887-03	.2000	1.321	521.5
229	45.000	.87000	2058.0	.1980-01	.2370-01	.2670-01	.9220	.1363-02	.1009-02	.2270	1.529	522.4
229	45.000	.88000	2059.0	.1800-01	.2160-01	.2440-01	.9220	.1246-02	.9176-03	.2030	1.367	525.8
229	45.000	.89000	2060.0	.1770-01	.2130-01	.2400-01	.9220	.1226-02	.9016-03	.1980	1.340	526.9
229	45.000	.90000	2061.0	.1100-01	.1320-01	.1490-01	.9220	.7601-03	.5605-03	.1240	.8430	525.1
229	45.000	.91000	2062.0	.1150-01	.1390-01	.1580-01	.9220	.8032-03	.5877-03	.1280	1.053	529.9
229	45.000	.92600	2063.0	.7300-02	.8800-02	.9900-02	.9220	.5064-03	.3705-03	.8000-01	.5730	529.8
229	45.000	.93500	2064.0	.1080-01	.1310-01	.1490-01	.9220	.7606-03	.5531-03	.1180	.8880	533.5
229	45.000	.94500	2065.0	.7700-02	.9300-02	.1060-01	.9220	.5396-03	.3943-03	.8500-01	.5710	530.6
216	180.00	.15000-01	2182.0	.4035	.6105	.5381	.9631	.2743-01	.2057-01	2.277	16.35	639.5
216	180.00	.20000-01	2183.0	.3954	.5508	.5029	.9621	.2564-01	.2016-01	2.681	19.66	617.2
216	180.00	.25000-01	2184.0	.2507	.3058	.2903	.9621	.1480-01	.1279-01	2.664	19.48	541.7
216	180.00	.40000-01	737.00	.2850	.3500	.3373	.9583	.1720-01	.1453-01	2.930	19.10	548.5
216	180.00	.45000-01	738.00	.3542	.4603	.4430	.9565	.2259-01	.1806-01	2.939	19.07	587.4
216	180.00	.60000-01	739.00	.2994	.3836	.3804	.9515	.1939-01	.1527-01	2.610	17.26	579.2
216	180.00	.70000-01	740.00	.2662	.3392	.3423	.9484	.1745-01	.1357-01	2.364	15.76	575.9

IH72, OTS CLEAN, EXTERNAL TANK HI/HREF (RVZT35)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
216	180.00	.80000-01	741.00	.2219	.2807	.2877	.9454	.1467-01	.1131-01	2.026	14.55	571.1
216	180.00	.10000+00	742.00	.2059	.2565	.2698	.9400	.1375-01	.1050-01	1.995	13.24	560.1
216	180.00	.12500	743.00	.1541	.1903	.2055	.9342	.1048-01	.7856-02	1.550	11.23	552.9
216	180.00	.15000	744.00	.1200	.1469	.1616	.9296	.8241-02	.6118-02	1.255	8.735	545.0
216	180.00	.17500	745.00	.8050-01	.9780-01	.1090	.9260	.5556-02	.4104-02	.8720	6.581	537.8
216	180.00	.20000	746.00	.5870-01	.7090-01	.7970-01	.9235	.4064-02	.2991-02	.6500	4.682	532.9
216	180.00	.21500	747.00	.4710-01	.5740-01	.6530-01	.9226	.3328-02	.2401-02	.5010	3.479	541.7
216	180.00	.23000	748.00	.4010-01	.4890-01	.5560-01	.9221	.2836-02	.2045-02	.4280	3.173	540.8
216	180.00	.24000	749.00	.2570-01	.3130-01	.3570-01	.9220	.1821-02	.1308-02	.2720	2.055	542.4
216	180.00	.25000	750.00	.1900-01	.2310-01	.2620-01	.9220	.1336-02	.9706-03	.2080	1.690	536.0
216	180.00	.35000	752.00	.3880-01	.4680-01	.5290-01	.9220	.2699-02	.1979-02	.4340	2.764	530.9
216	180.00	.40000	753.00	.3810-01	.4570-01	.5150-01	.9220	.2624-02	.1941-02	.4360	2.836	525.3
216	180.00	.50000	754.00	.3710-01	.4430-01	.4960-01	.9220	.2529-02	.1893-02	.4410	2.927	517.4
216	180.00	.60000	755.00	.4780-01	.5750-01	.6490-01	.9220	.3307-02	.2438-02	.5430	3.516	527.4
216	180.00	.70000	756.00	.3950-01	.4710-01	.5270-01	.9220	.2684-02	.2016-02	.4730	3.176	515.3
216	180.00	.80000	757.00	.3640-01	.4350-01	.4890-01	.9220	.2493-02	.1854-02	.4230	2.688	521.8
216	180.00	.90000	758.00	.2570-01	.3090-01	.3480-01	.9220	.1774-02	.1309-02	.2920	1.908	526.9
216	235.00	.22000	759.00	.7650-01	.9470-01	.1071	.9257	.5461-02	.3898-02	.7590	5.624	555.4
216	235.00	.25000	760.00	.3970-01	.4860-01	.5500-01	.9237	.2806-02	.2023-02	.4150	3.255	545.0
216	235.00	.30000	762.00	.7400-01	.9080-01	.1032	.9237	.5262-02	.3771-02	.7610	4.573	548.3
216	235.00	.32000	763.00	.8700-01	.1071	.1219	.9237	.6217-02	.4435-02	.8850	5.229	550.5
216	235.00	.34000	764.00	.1036	.1278	.1457	.9237	.7427-02	.5283-02	1.047	6.195	552.0
216	235.00	.36000	765.00	.1318	.1652	.1906	.9237	.9715-02	.6719-02	1.246	7.428	564.6
216	235.00	.38000	766.00	.1123	.1393	.1594	.9237	.8124-02	.5726-02	1.110	6.715	556.3
218	247.00	.23000	768.00	.7810-01	.9770-01	.1116	.9252	.5686-02	.3980-02	.7450	5.496	563.1
218	247.00	.25000	769.00	.4180-01	.5180-01	.5910-01	.9242	.3013-02	.2128-02	.4120	3.188	556.7
218	247.00	.27000	770.00	.5170-01	.6480-01	.7460-01	.9242	.3800-02	.2634-02	.4880	3.530	564.8
218	247.00	.30000	772.00	.9420-01	.1186	.1369	.9242	.6975-02	.4802-02	.8770	5.303	567.7
218	247.00	.31000	773.00	.1133	.1424	.1642	.9242	.8369-02	.5772-02	1.058	6.348	567.0
218	247.00	.32000	774.00	.1412	.1797	.2091	.9242	.1066-01	.7194-02	1.259	7.464	575.2
218	247.00	.32500	775.00	.1576	.2022	.2367	.9242	.1207-01	.8033-02	1.367	8.103	580.1
218	247.00	.33000	776.00	.1711	.2205	.2591	.9242	.1321-01	.8723-02	1.461	8.674	582.7
218	247.00	.33500	777.00	.1893	.2450	.2889	.9242	.1473-01	.9648-02	1.591	9.437	585.3
218	247.00	.34000	778.00	.1900	.2456	.2894	.9242	.1475-01	.9683-02	1.603	9.511	584.6
218	247.00	.34500	779.00	.1904	.2464	.2904	.9242	.1480-01	.9706-02	1.604	9.538	585.0
218	247.00	.35000	780.00	.1682	.2147	.2505	.9242	.1277-01	.8570-02	1.482	8.873	577.3
218	247.00	.35500	781.00	.1000-02	.1200-02	.1300-02	.9242	.6799-04	.5015-04	.1100-01	.6700-01	533.4
216	247.00	.36000	782.00	.1397	.1760	.2033	.9242	.1036-01	.7123-02	1.296	7.813	568.2
216	247.00	.36500	783.00	.1202	.1499	.1719	.9242	.8764-02	.6128-02	1.159	6.994	561.0
216	247.00	.37000	784.00	.1067	.1321	.1506	.9242	.7676-02	.5441-02	1.063	6.468	554.9
216	247.00	.38000	786.00	.9070-01	.1113	.1262	.9242	.6431-02	.4625-02	.9370	5.787	547.6
216	247.00	.39000	787.00	.8770-01	.1073	.1214	.9242	.6189-02	.4470-02	.9150	5.675	545.4
216	247.00	.40000	788.00	.8460-01	.1040	.1179	.9242	.6010-02	.4315-02	.8700	5.431	548.6

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
217	247.00	.50000	789.00	.4840-01	.5810-01	.6480-01	.9242	.3304-02	.2468-02	.5550	3.593	525.8
217	247.00	.60000	790.00	.4650-01	.5700-01	.6450-01	.9242	.3290-02	.2369-02	.4820	3.161	547.2
217	247.00	.70000	791.00	.6950-01	.8530-01	.9660-01	.9242	.4925-02	.3545-02	.7190	5.079	547.6
217	247.00	.90000	793.00	.3680-01	.4490-01	.5070-01	.9242	.2585-02	.1878-02	.3900	2.523	542.6
230	247.00	.92600	2144.0	.1930-01	.2390-01	.2720-01	.9242	.1385-02	.9853-03	.1930	1.349	550.7
230	247.00	.93000	2149.0	.2500-01	.3100-01	.3540-01	.9242	.1801-02	.1276-02	.2480	1.782	552.8
230	250.57	.92600	2143.0	.2290-01	.2830-01	.3210-01	.9243	.1638-02	.1165-02	.2280	1.592	551.0
230	250.57	.93000	2148.0	.3490-01	.4340-01	.4950-01	.9243	.2522-02	.1780-02	.3420	2.407	554.7
230	250.57	.93700	2087.0	.4010-01	.4970-01	.5660-01	.9243	.2885-02	.2040-02	.3940	2.800	553.8
217	258.00	.27000	794.00	.5340-01	.6660-01	.7620-01	.9245	.3886-02	.2725-02	.5170	3.659	560.8
217	258.00	.29000	795.00	.9730-01	.1221	.1403	.9245	.7153-02	.4962-02	.9180	5.603	565.5
228	258.00	.32000	798.00	.2311	.3064	.3675	.9245	.1872-01	.1177-01	1.787	10.52	594.9
228	258.00	.34000	802.00	.2388	.3178	.3824	.9245	.1947-01	.1216-01	1.825	10.76	596.7
228	258.00	.34500	803.00	.2143	.2812	.3343	.9245	.1702-01	.1091-01	1.715	10.18	589.7
228	258.00	.35500	805.00	.1485	.1881	.2176	.9245	.1108-01	.7562-02	1.342	8.044	569.3
228	258.00	.36000	806.00	.1243	.1554	.1781	.9245	.9069-02	.6330-02	1.182	7.134	560.2
228	258.00	.36500	807.00	.1108	.1374	.1567	.9245	.7978-02	.5641-02	1.086	6.594	554.3
228	258.00	.37000	808.00	.1056	.1307	.1487	.9245	.7575-02	.5375-02	1.044	6.361	552.6
228	258.00	.37500	809.00	.1068	.1324	.1509	.9245	.7684-02	.5439-02	1.049	6.391	553.9
228	258.00	.38000	810.00	.1102	.1370	.1564	.9245	.7963-02	.5610-02	1.070	6.547	556.0
217	258.00	.40000	812.00	.8000-01	.9790-01	.1105	.9245	.5636-02	.4077-02	.8350	5.150	545.7
230	258.00	.93500	2151.0	.3390-01	.4210-01	.4800-01	.9245	.2444-02	.1727-02	.3320	2.335	554.6
217	270.00	.40000-01	985.00	.3205	.4259	.3665	.9746	.1869-01	.1634-01	2.479	15.71	598.9
217	270.00	.50000-01	986.00	.3808	.5115	.4472	.9709	.2280-01	.1942-01	2.851	17.92	603.7
217	270.00	.60000-01	987.00	.3849	.5113	.4591	.9673	.2341-01	.1963-01	2.981	19.12	598.6
217	270.00	.70000-01	988.00	.3454	.4587	.4207	.9638	.2145-01	.1761-01	2.677	17.54	598.5
217	270.00	.80000-01	989.00	.3124	.4114	.3860	.9604	.1968-01	.1593-01	2.483	17.18	594.6
217	270.00	.10000+00	990.00	.2907	.3725	.3644	.9539	.1858-01	.1482-01	2.532	16.25	579.7
217	270.00	.15000	991.00	.1855	.2322	.2444	.9401	.1246-01	.9460-02	1.766	12.86	563.8
217	270.00	.20000	992.00	.1116	.1363	.1496	.9299	.7626-02	.5692-02	1.181	8.005	543.0
217	270.00	.23000	813.00	.8370-01	.1043	.1186	.9257	.6048-02	.4267-02	.8080	5.833	561.1
217	270.00	.24000	814.00	.6330-01	.7900-01	.9040-01	.9246	.4610-02	.3226-02	.6080	4.882	562.0
217	270.00	.25000	815.00	.3820-01	.4720-01	.5350-01	.9246	.2730-02	.1948-02	.3850	3.026	553.0
217	270.00	.27000	816.00	.4550-01	.5660-01	.6450-01	.9246	.3291-02	.2322-02	.4460	3.154	558.3
217	270.00	.29000	817.00	.2123	.2728	.3189	.9246	.1626-01	.1083-01	1.832	11.19	581.3
217	270.00	.30000	818.00	.2873	.3756	.4451	.9246	.2269-01	.1465-01	2.338	13.98	590.9
217	270.00	.31000	819.00	.2865	.3760	.4468	.9246	.2278-01	.1461-01	2.305	13.66	592.7
217	270.00	.32000	820.00	.2705	.3537	.4192	.9246	.2137-01	.1379-01	2.201	13.02	590.9
217	270.00	.32500	821.00	.2806	.3677	.4365	.9246	.2226-01	.1431-01	2.267	13.36	592.1
217	270.00	.33000	822.00	.2947	.3912	.4693	.9246	.2393-01	.1503-01	2.286	13.47	598.4
217	270.00	.33500	823.00	.3663	.4981	.6094	.9246	.3107-01	.1868-01	2.650	15.58	608.7
217	270.00	.34500	825.00	.2457	.3149	.3675	.9246	.1874-01	.1253-01	2.139	12.72	579.8
217	270.00	.36000	828.00	.1293	.1599	.1817	.9246	.9264-02	.6593-02	1.294	7.770	554.3

IH72, OTS CLEAN, EXTERNAL TANK HI/HREF (RVZT35)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
217	270.00	.37000	830.00	.2860-01	.3490-01	.3920-01	.9246	.2000-02	.1457-02	.3030	1.844	542.2
217	270.00	.37500	831.00	.1593	.1995	.2289	.9246	.1167-01	.8120-02	1.510	9.123	564.5
217	270.00	.38000	832.00	.1283	.1598	.1826	.9246	.9313-02	.6541-02	1.244	7.530	560.4
217	270.00	.39000	833.00	.9310-01	.1148	.1302	.9246	.6640-02	.4747-02	.9420	5.791	552.0
217	270.00	.40000	834.00	.7290-01	.8930-01	.1009	.9246	.5144-02	.3716-02	.7580	4.682	546.7
217	270.00	.50000	835.00	.3030-01	.3700-01	.4160-01	.9246	.2123-02	.1543-02	.3190	2.021	543.5
217	270.00	.60000	836.00	.5970-01	.7350-01	.8320-01	.9246	.4243-02	.3046-02	.6110	4.065	549.9
217	270.00	.70000	837.00	.6790-01	.8360-01	.9480-01	.9246	.4832-02	.3460-02	.6900	4.846	551.2
217	270.00	.80000	838.00	.8030-01	.9860-01	.1115	.9246	.5686-02	.4094-02	.8270	5.137	548.4
217	270.00	.90000	839.00	.4750-01	.5840-01	.6610-01	.9246	.3368-02	.2423-02	.4890	3.120	548.9
230	270.00	.92600	2141.0	.3470-01	.4340-01	.4970-01	.9246	.2529-02	.1768-02	.3310	2.249	559.8
230	270.00	.93000	2146.0	.3810-01	.4780-01	.5490-01	.9246	.2796-02	.1941-02	.3570	2.504	562.7
230	270.00	.93500	2150.0	.4210-01	.5270-01	.6050-01	.9246	.3080-02	.2144-02	.3970	2.786	561.5
230	289.43	.92600	2140.0	.5030-01	.6390-01	.7430-01	.9243	.3783-02	.2564-02	.4500	3.109	571.4
230	289.43	.93000	2145.0	.5770-01	.7390-01	.8630-01	.9243	.4395-02	.2939-02	.5020	3.524	576.2
217	292.50	.23000	840.00	.6800-01	.8470-01	.9640-01	.9252	.4918-02	.3465-02	.6580	5.270	560.5
217	292.50	.25000	841.00	.4050-01	.4990-01	.5670-01	.9242	.2889-02	.2065-02	.4120	3.184	551.1
217	292.50	.35000	845.00	.1890	.2441	.2872	.9242	.1464-01	.9639-02	1.604	9.651	584.1
217	292.50	.37000	846.00	.1123	.1395	.1595	.9242	.8134-02	.5726-02	1.100	6.739	558.4
217	292.50	.40000	847.00	.8860-01	.1087	.1232	.9242	.6282-02	.4516-02	.9140	5.691	548.2
217	292.50	.45000	848.00	.5300-01	.6470-01	.7290-01	.9242	.3719-02	.2704-02	.5630	3.549	542.2
217	292.50	.60000	851.00	.4700-01	.5780-01	.6560-01	.9242	.3347-02	.2396-02	.4800	3.208	550.4
217	292.50	.65000	852.00	.6900-01	.8550-01	.9750-01	.9242	.4973-02	.3518-02	.6840	4.632	556.1
217	292.50	.70000	853.00	.1094	.1386	.1606	.9242	.8191-02	.5578-02	.9940	6.891	572.2
217	292.50	.75000	854.00	.1234	.1563	.1812	.9242	.9241-02	.6292-02	1.121	7.179	572.3
217	292.50	.80000	855.00	.1173	.1469	.1689	.9242	.8610-02	.5982-02	1.115	7.189	564.2
230	292.50	.82000	2129.0	.1250	.1570	.1809	.9242	.9214-02	.6367-02	1.166	7.086	563.7
230	292.50	.83000	2130.0	.1172	.1477	.1705	.9242	.8683-02	.5973-02	1.083	6.628	565.6
230	292.50	.85000	2132.0	.1181	.1489	.1720	.9242	.8764-02	.6016-02	1.086	6.683	566.4
230	292.50	.86000	2133.0	.1171	.1477	.1707	.9242	.8697-02	.5965-02	1.075	6.575	566.7
230	292.50	.87000	2134.0	.1253	.1583	.1832	.9242	.9331-02	.6381-02	1.142	7.023	567.9
230	292.50	.88000	2135.0	.1107	.1401	.1624	.9242	.8270-02	.5640-02	1.004	6.168	568.9
230	292.50	.89000	2136.0	.1091	.1382	.1602	.9242	.8159-02	.5560-02	.9880	6.087	569.2
217	292.50	.90000	856.00	.7590-01	.9470-01	.1086	.9242	.5537-02	.3869-02	.7310	4.704	561.7
230	292.50	.92600	2138.0	.5270-01	.6680-01	.7760-01	.9242	.3952-02	.2682-02	.4720	3.266	570.7
230	292.50	.93000	2139.0	.6030-01	.7690-01	.8960-01	.9242	.4566-02	.3072-02	.5310	3.762	573.9
230	301.50	.82000	2116.0	.1027	.1287	.1483	.9239	.7556-02	.5230-02	.9660	5.873	562.2
230	301.50	.83000	2117.0	.1010	.1264	.1455	.9239	.7412-02	.5146-02	.9570	5.791	560.9
230	301.50	.83500	2118.0	.1030	.1289	.1483	.9239	.7556-02	.5245-02	.9750	5.849	561.0
230	301.50	.84000	2119.0	.9970-01	.1248	.1437	.9239	.7320-02	.5081-02	.9440	5.713	561.0
230	301.50	.85000	2120.0	.1054	.1321	.1523	.9239	.7758-02	.5371-02	.9930	6.020	562.1
230	301.50	.86000	2021.0	.1009	.1267	.1463	.9239	.7455-02	.5139-02	.9400	5.729	563.9
230	301.50	.87000	2122.0	.1049	.1321	.1527	.9239	.7780-02	.5344-02	.9700	5.890	565.3

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
230	301.50	.88000	2123.0	.9740-01	.1229	.1423	.9239	.7248-02	.4964-02	.8950	5.463	566.5
230	301.50	.89000	2124.0	.9880-01	.1247	.1445	.9239	.7359-02	.5034-02	.9060	5.572	566.9
230	301.50	.90000	2125.0	.7320-01	.9210-01	.1065	.9239	.5424-02	.3728-02	.6780	4.210	565.0
230	301.50	.92600	2127.0	.7580-01	.9610-01	.1118	.9239	.5695-02	.3859-02	.6810	4.214	570.5
230	301.50	.93500	2128.0	.7910-01	.1003	.1165	.9239	.5935-02	.4030-02	.7140	4.757	569.7
230	305.40	.83000	2114.0	.9690-01	.1211	.1394	.9237	.7103-02	.4938-02	.9230	5.586	560.0
230	305.40	.83500	2115.0	.9430-01	.1181	.1360	.9237	.6930-02	.4805-02	.8930	5.447	561.1
217	305.40	.84000	857.00	.9600-01	.1193	.1367	.9237	.6969-02	.4897-02	.9430	5.793	558.0
228	305.40	.85000	858.00	.9250-01	.1156	.1330	.9237	.6773-02	.4711-02	.8810	5.439	559.8
228	305.40	.86000	859.00	.9510-01	.1191	.1373	.9237	.6991-02	.4844-02	.8980	5.586	561.4
228	305.40	.87000	860.00	.9480-01	.1191	.1376	.9237	.7007-02	.4829-02	.8840	5.512	563.7
228	305.40	.88000	861.00	.9330-01	.1173	.1357	.9237	.6912-02	.4751-02	.8650	5.389	564.7
228	305.40	.89000	862.00	.9460-01	.1191	.1379	.9237	.7022-02	.4818-02	.8740	5.472	565.4
228	305.40	.90000	863.00	.8420-01	.1059	.1225	.9237	.6240-02	.4288-02	.7810	4.918	564.7
228	305.40	.91000	864.00	.5050-01	.6300-01	.7240-01	.9237	.3687-02	.2574-02	.4850	3.507	558.3
228	305.40	.92600	865.00	.6590-01	.8330-01	.9670-01	.9237	.4923-02	.3357-02	.6010	4.312	567.7
228	309.30	.80000	866.00	.9170-01	.1146	.1320	.9236	.6724-02	.4672-02	.8740	5.456	559.8
228	309.30	.81000	867.00	.8940-01	.1118	.1288	.9236	.6559-02	.4554-02	.8500	5.278	560.1
228	309.30	.83000	869.00	.6880-01	.8520-01	.9750-01	.9236	.4966-02	.3503-02	.6790	4.239	553.1
228	315.00	.50000-01	871.00	.3793	.5036	.4560	.9659	.2322-01	.1931-01	2.922	18.23	595.5
228	315.00	.60000-01	872.00	.3429	.4519	.4190	.9624	.2134-01	.1746-01	2.702	17.55	592.1
217	315.00	.70000-01	873.00	.3277	.4287	.4064	.9589	.2072-01	.1671-01	2.661	17.70	591.3
217	315.00	.15000	876.00	.1651	.2064	.2213	.9366	.1129-01	.8418-02	1.577	11.45	563.2
217	315.00	.20000	877.00	.1026	.1253	.1392	.9275	.7100-02	.5231-02	1.081	7.297	543.9
217	315.00	.35000	878.00	.8890-01	.1095	.1249	.9233	.6368-02	.4532-02	.9050	5.613	550.8
217	315.00	.55000	881.00	.5240-01	.6480-01	.7410-01	.9233	.3781-02	.2672-02	.5240	3.479	554.3
217	315.00	.60000	882.00	.1160	.1465	.1703	.9233	.8685-02	.5916-02	1.068	7.094	570.0
217	315.00	.65000	883.00	.1231	.1559	.1817	.9233	.9266-02	.6279-02	1.121	7.555	572.0
217	315.00	.70000	884.00	.1023	.1290	.1499	.9233	.7642-02	.5217-02	.9460	6.648	569.2
217	315.00	.75000	885.00	.7060-01	.8800-01	.1012	.9233	.5162-02	.3602-02	.6860	4.294	560.1
217	315.00	.80000	886.00	.8280-01	.1025	.1174	.9233	.5987-02	.4220-02	.8230	5.149	555.5
217	315.00	.84000	887.00	.7720-01	.9540-01	.1091	.9233	.5564-02	.3938-02	.7760	4.858	553.6
228	315.00	.85000	888.00	.7360-01	.9160-01	.1054	.9233	.5367-02	.3747-02	.7110	4.481	557.1
228	315.00	.87000	890.00	.7340-01	.9160-01	.1056	.9233	.5378-02	.3739-02	.7020	4.437	559.0
228	315.00	.88000	891.00	.8070-01	.1011	.1167	.9233	.5945-02	.4112-02	.7630	4.845	561.1
228	315.00	.89000	892.00	.8310-01	.1042	.1204	.9233	.6134-02	.4231-02	.7810	5.042	562.2
228	315.00	.90000	893.00	.8220-01	.1030	.1192	.9233	.6069-02	.4184-02	.7720	5.039	562.4
228	315.00	.91000	894.00	.3840-01	.4760-01	.5460-01	.9233	.2780-02	.1956-02	.3780	2.747	553.6
228	315.00	.92600	895.00	.5450-01	.6850-01	.7930-01	.9233	.4037-02	.2776-02	.5090	3.667	563.6
228	322.30	.42000	897.00	.8600-01	.1065	.1221	.9230	.6219-02	.4381-02	.8520	5.466	552.2
228	322.30	.43500	898.00	.7030-01	.8680-01	.9940-01	.9230	.5062-02	.3580-02	.7040	4.389	550.3
228	322.30	.45000	899.00	.7050-01	.8710-01	.9980-01	.9230	.5081-02	.3591-02	.7040	4.598	550.7
228	322.30	.50000	900.00	.7500-01	.9370-01	.1083	.9230	.5515-02	.3817-02	.7130	4.718	560.0

IH72, OTS CLEAN, EXTERNAL TANK HI/HREF (RVZT35)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
228	322.30	.60000	901.00	.1351	.1729	.2037	.9230	.1037-01	.6880-02	1.175	7.693	576.0
228	322.30	.70000	902.00	.8730-01	.1099	.1278	.9230	.6506-02	.4445-02	.8070	5.454	565.3
230	324.45	.41000	2110.0	.8050-01	.9970-01	.1145	.9229	.5834-02	.4099-02	.7940	4.986	553.2
230	324.45	.92600	2164.0	.3270-01	.4080-01	.4710-01	.9229	.2400-02	.1667-02	.3150	2.223	558.2
230	326.85	.40000	2107.0	.1000-02	.1200-02	.1400-02	.9228	.6925-04	.5056-04	.1100-01	.6900-01	533.2
230	326.85	.40500	2108.0	.6960-01	.8570-01	.9800-01	.9228	.4991-02	.3546-02	.7060	4.448	547.7
229	326.85	.44000	2021.0	.8140-01	.1003	.1149	.9228	.5858-02	.4152-02	.8220	5.220	549.0
229	326.85	.54600	2024.0	.6660-01	.8400-01	.9790-01	.9228	.4994-02	.3399-02	.6130	4.070	566.5
229	326.85	.56100	2025.0	.1400	.1808	.2150	.9228	.1096-01	.7139-02	1.181	8.117	581.7
229	326.85	.61600	2026.0	.1203	.1528	.1791	.9228	.9133-02	.6134-02	1.078	7.400	571.4
229	326.85	.65200	2027.0	.1050	.1319	.1532	.9228	.7813-02	.5353-02	.9800	6.756	563.9
229	326.85	.68600	2028.0	.9020-01	.1133	.1315	.9228	.6708-02	.4600-02	.8440	5.874	563.5
229	326.85	.72260	2029.0	.5930-01	.7410-01	.8580-01	.9228	.4376-02	.3026-02	.5660	3.918	560.1
229	326.85	.75790	2030.0	.4540-01	.5620-01	.6470-01	.9228	.3299-02	.2313-02	.4470	2.845	554.0
229	326.85	.79310	2031.0	.8330-01	.1039	.1201	.9228	.6123-02	.4248-02	.8000	4.984	558.7
229	326.85	.82830	2032.0	.8340-01	.1037	.1196	.9228	.6097-02	.4253-02	.8110	5.099	556.4
229	326.85	.86350	2033.0	.8490-01	.1054	.1213	.9228	.6187-02	.4327-02	.8300	5.182	555.1
229	326.85	.90000	2034.0	.8570-01	.1066	.1229	.9228	.6269-02	.4368-02	.8310	5.135	556.9
230	326.85	.92600	2163.0	.3320-01	.4130-01	.4770-01	.9228	.2432-02	.1690-02	.3190	2.255	558.0
229	326.85	.93390	2035.0	.4660-01	.5790-01	.6680-01	.9228	.3405-02	.2375-02	.4530	3.022	556.3
230	330.20	.40000	2104.0	.5920-01	.7260-01	.8290-01	.9227	.4223-02	.3015-02	.6090	3.840	545.0
230	330.20	.40500	2105.0	.5890-01	.7230-01	.8250-01	.9227	.4203-02	.3003-02	.6070	3.831	544.6
230	330.20	.41000	2106.0	.6140-01	.7560-01	.8650-01	.9227	.4404-02	.3129-02	.6240	3.922	547.3
228	330.20	.42000	905.00	.6840-01	.8410-01	.9610-01	.9227	.4896-02	.3485-02	.6980	4.504	546.4
228	330.20	.43500	906.00	.7460-01	.9220-01	.1058	.9227	.5390-02	.3798-02	.7430	4.807	551.2
228	330.20	.45000	907.00	.7990-01	.9920-01	.1143	.9227	.5818-02	.4070-02	.7820	5.083	554.6
228	330.20	.50000	908.00	.1130	.1452	.1719	.9227	.8754-02	.5756-02	.9710	6.834	578.2
228	330.20	.60000	909.00	.1306	.1669	.1966	.9227	.1001-01	.6653-02	1.145	7.386	574.8
228	330.20	.70000	910.00	.9190-01	.1161	.1356	.9227	.6907-02	.4681-02	.8390	5.596	567.6
228	330.20	.80000	911.00	.5960-01	.7400-01	.8530-01	.9227	.4346-02	.3035-02	.5810	3.711	555.3
228	330.20	.87000	912.00	.1180-01	.1440-01	.1630-01	.9227	.8299-03	.6003-03	.1250	.8050	538.0
230	330.20	.92600	2162.0	.3160-01	.3940-01	.4550-01	.9227	.2318-02	.1611-02	.3050	2.148	557.6
230	334.98	.92600	2161.0	.3530-01	.4400-01	.5090-01	.9225	.2593-02	.1796-02	.3380	2.376	558.4
228	334.98	.93500	913.00	.3520-01	.4290-01	.4880-01	.9225	.2485-02	.1795-02	.3740	2.732	538.3
228	337.50	.40000-01	915.00	.3444	.4547	.4167	.9642	.2122-01	.1754-01	2.699	16.72	592.9
228	337.50	.50000-01	916.00	.3596	.4725	.4429	.9606	.2256-01	.1831-01	2.863	18.06	590.5
228	337.50	.70000-01	918.00	.2595	.3197	.3140	.9539	.1599-01	.1321-01	2.622	18.21	548.4
228	337.50	.80000-01	919.00	.2722	.3485	.3471	.9507	.1768-01	.1386-01	2.365	15.90	576.2
228	337.50	.10000+00	920.00	.2236	.2806	.2882	.9449	.1467-01	.1139-01	2.092	13.86	563.1
228	337.50	.15000	921.00	.1399	.1730	.1881	.9331	.9578-02	.7123-02	1.389	10.04	551.8
228	337.50	.20000	922.00	.8230-01	.1003	.1124	.9254	.5726-02	.4193-02	.8730	5.837	538.7
228	337.50	.42000	923.00	.9820-01	.1227	.1423	.9224	.7245-02	.4999-02	.9340	6.056	559.9
230	337.50	.42500	2167.0	.7250-01	.8960-01	.1031	.9224	.5250-02	.3695-02	.7230	4.652	551.2

DATE 23 JUN 81

IH72. AEDC V41A-R2A. INTEGRATED VEHICLE HEATING RATES

IH72. OTS CLEAN. EXTERNAL TANK HI/HREF

(RVZT35)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
230	337.50	.43000	2172.0	.7000-03	.9000-03	.1000-02	.9224	.4984-04	.3622-04	.8000-02	.5000-01	534.8
228	337.50	.43500	924.00	.5820-01	.7140-01	.8160-01	.9224	.4156-02	.2962-02	.5970	3.912	545.1
228	337.50	.85000	926.00	.7700-01	.9570-01	.1104	.9224	.5624-02	.3923-02	.7520	4.841	555.2
228	337.50	.86000	927.00	.7540-01	.9360-01	.1080	.9224	.5502-02	.3841-02	.7370	4.762	554.9
228	337.50	.87000	928.00	.7320-01	.9080-01	.1047	.9224	.5330-02	.3727-02	.7180	4.654	554.1
228	337.50	.88000	929.00	.4340-01	.5260-01	.5950-01	.9224	.3029-02	.2212-02	.4750	3.132	532.0
228	337.50	.89000	930.00	.7450-01	.9300-01	.1077	.9224	.5484-02	.3793-02	.7130	4.662	558.9
228	337.50	.90000	931.00	.5670-01	.7080-01	.8200-01	.9224	.4175-02	.2888-02	.5430	3.641	558.7
228	337.50	.91000	932.00	.3220-01	.3970-01	.4560-01	.9224	.2324-02	.1638-02	.3220	2.349	550.5
217	337.50	.92600	933.00	.3660-01	.4510-01	.5180-01	.9224	.2642-02	.1867-02	.3710	2.699	551.8
217	343.12	.41500	934.00	.6780-01	.8280-01	.9450-01	.9222	.4818-02	.3455-02	.7130	4.630	544.2
217	343.12	.42000	935.00	.7970-01	.9840-01	.1132	.9222	.5771-02	.4066-02	.8030	5.238	553.0
217	343.12	.42500	936.00	.1194	.1505	.1758	.9222	.8966-02	.6090-02	1.108	7.194	568.5
217	343.12	.44500	939.00	.1229	.1558	.1831	.9222	.9337-02	.6267-02	1.112	7.290	573.0
217	343.12	.45000	940.00	.1235	.1573	.1855	.9222	.9460-02	.6297-02	1.099	7.195	575.9
217	343.12	.50000	941.00	.1539	.2020	.2445	.9222	.1247-01	.7845-02	1.235	8.184	593.1
217	343.12	.60000	942.00	.1295	.1636	.1916	.9222	.9769-02	.6605-02	1.190	7.587	570.3
217	343.12	.80000	944.00	.7130-01	.8830-01	.1017	.9222	.5185-02	.3636-02	.7100	4.614	555.2
230	345.56	.42500	2168.0	.1104	.1392	.1629	.9222	.8296-02	.5625-02	1.016	6.485	566.3
230	345.56	.92600	2160.0	.3980-01	.4940-01	.5700-01	.9222	.2903-02	.2026-02	.3900	2.742	554.5
217	348.00	.35000	945.00	.4920-01	.5960-01	.6760-01	.9221	.3447-02	.2507-02	.5370	3.422	536.3
217	348.00	.36000	946.00	.5150-01	.6250-01	.7100-01	.9221	.3618-02	.2626-02	.5600	3.574	537.4
217	348.00	.37000	947.00	.5160-01	.6260-01	.7100-01	.9221	.3619-02	.2630-02	.5620	3.603	536.7
228	348.00	.37500	948.00	.4780-01	.5830-01	.6630-01	.9221	.3378-02	.2435-02	.5080	3.249	538.4
228	348.00	.38000	949.00	.4530-01	.5520-01	.6230-01	.9221	.3199-02	.2309-02	.4830	3.118	537.8
228	348.00	.38500	950.00	.4280-01	.5210-01	.5930-01	.9221	.3021-02	.2181-02	.4560	2.955	537.6
228	348.00	.39000	951.00	.4210-01	.5120-01	.5830-01	.9221	.2970-02	.2142-02	.4470	2.912	538.2
228	348.00	.39500	952.00	.4540-01	.5540-01	.6320-01	.9221	.3218-02	.2313-02	.4780	3.067	540.1
228	348.00	.40000	953.00	.4650-01	.5690-01	.6490-01	.9221	.3305-02	.2369-02	.4870	3.174	541.4
228	348.00	.41000	955.00	.7300-01	.9020-01	.1039	.9221	.5290-02	.3716-02	.7270	4.730	551.3
228	348.00	.41500	956.00	.7470-01	.9300-01	.1078	.9221	.5489-02	.3803-02	.7200	4.687	557.4
228	348.00	.42000	957.00	.1081	.1361	.1591	.9221	.8104-02	.5503-02	.9970	6.483	565.6
228	348.00	.42500	958.00	.9450-01	.1180	.1370	.9221	.6979-02	.4810-02	.9000	5.869	559.7
228	348.00	.43000	959.00	.1288	.1646	.1949	.9221	.9923-02	.6558-02	1.125	7.254	575.3
228	348.00	.44000	960.00	.1422	.1849	.2221	.9221	.1131-01	.7243-02	1.172	7.546	585.0
228	348.00	.44500	961.00	.1453	.1902	.2297	.9221	.1170-01	.7402-02	1.172	7.536	588.4
228	348.00	.85000	968.00	.7290-01	.9010-01	.1037	.9221	.5283-02	.3710-02	.7250	4.688	551.5
228	348.00	.86000	969.00	.6790-01	.8410-01	.9700-01	.9221	.4940-02	.3458-02	.6710	4.349	552.9
229	348.00	.89000	972.00	.6520-01	.8080-01	.9330-01	.9221	.4757-02	.3326-02	.6440	4.260	553.6
229	348.00	.91000	974.00	.2670-01	.3280-01	.3760-01	.9221	.1915-02	.1362-02	.2740	2.003	545.5
230	354.00	.42500	2169.0	.1505	.1976	.2397	.9220	.1221-01	.7666-02	1.200	7.571	590.3
230	354.00	.43000	2174.0	.1563	.2061	.2510	.9220	.1278-01	.7960-02	1.228	7.742	592.5
230	354.00	.43500	2177.0	.1585	.2082	.2526	.9220	.1287-01	.8074-02	1.262	7.964	590.5

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN, EXTERNAL TANK HI/HREF

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
230	354.00	.44000	2179.0	.1630	.2140	.2594	.9220	.1321-01	.8302-02	1.300	8.206	590.2
230	355.16	.92600	2158.0	.3210-01	.3960-01	.4560-01	.9220	.2323-02	.1637-02	.3230	2.314	549.6

EXTERNAL TANK

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
213	-.1200	.0000	4.020	72.30	749.0	177.1	.4640	5.244	2621.	.2196-03	.1426-06	4.038
214	-.1200	.0000	4.020	72.20	749.0	177.1	.4630	5.241	2621.	.2195-03	.1425-06	4.037
215	-.1200	.0000	4.020	72.20	750.0	177.2	.4630	5.234	2622.	.2191-03	.1426-06	4.028
225	-.4000-01	.0000	4.020	72.20	747.0	176.6	.4630	5.240	2618.	.2201-03	.1422-06	4.052
226	-.2000-01	.0000	4.020	72.40	747.0	176.5	.4640	5.249	2617.	.2205-03	.1421-06	4.061
227	-.2000-01	.0000	4.020	72.30	747.0	176.5	.4640	5.245	2617.	.2204-03	.1421-06	4.058

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
213	.5100-01	.1144-01
214	.5099-01	.1144-01
215	.5096-01	.1145-01
225	.5096-01	.1143-01
226	.5101-01	.1141-01
227	.5099-01	.1142-01

TEST DATA

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
214	.00000	.25000-01	2187.0	.5269	.7009	.6442	.9633	.3285-01	.2686-01	4.053	27.90	598.4
214	.00000	.30000-01	2188.0	.5151	.6820	.6285	.9631	.3204-01	.2626-01	4.019	27.87	596.3
213	.00000	.40000-01	600.00	.5743	.7105	.6803	.9594	.3470-01	.2929-01	5.727	36.69	554.0
213	.00000	.50000-01	601.00	.4284	.5344	.5195	.9558	.2649-01	.2185-01	4.126	26.42	560.6
213	.00000	.70000-01	603.00	.3187	.3924	.3938	.9492	.2009-01	.1625-01	3.242	22.09	550.0
213	.00000	.80000-01	604.00	.3094	.3788	.3854	.9462	.1966-01	.1578-01	3.228	21.02	544.9
213	.00000	.15000	606.00	.1178	.1406	.1525	.9299	.7779-02	.6008-02	1.388	10.24	518.5
213	.00000	.20000	607.00	.6030-01	.7170-01	.7970-01	.9236	.4063-02	.3076-02	.7250	4.809	513.8
213	.00000	.21000	608.00	.5840-01	.7020-01	.7880-01	.9229	.4017-02	.2978-02	.6650	4.641	526.2
213	.00000	.22000	609.00	.4720-01	.5670-01	.6380-01	.9224	.3252-02	.2407-02	.5380	4.047	525.9
213	.00000	.30000	610.00	.4320-01	.5200-01	.5880-01	.9220	.2999-02	.2201-02	.4840	3.339	529.8
213	.00000	.35000	611.00	.4070-01	.4870-01	.5480-01	.9220	.2795-02	.2074-02	.4700	3.171	522.8

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
213	.00000	.36000	612.00	.4030-01	.4830-01	.5440-01	.9220	.2772-02	.2055-02	.4640	3.156	523.6
213	.00000	.37500	614.00	.3980-01	.4790-01	.5410-01	.9220	.2758-02	.2032-02	.4510	3.063	527.4
215	.00000	.38500	616.00	.5430-01	.6590-01	.7480-01	.9220	.3813-02	.2768-02	.5900	3.989	536.4
215	.00000	.39500	618.00	.6330-01	.7730-01	.8820-01	.9220	.4496-02	.3224-02	.6660	4.499	543.1
215	.00000	.40000	619.00	.6640-01	.8130-01	.9300-01	.9220	.4739-02	.3383-02	.6910	4.635	545.4
215	.00000	.40500	620.00	.6660-01	.8140-01	.9290-01	.9220	.4735-02	.3393-02	.7000	4.714	543.4
215	.00000	.41500	622.00	.1203	.1488	.1716	.9220	.8743-02	.6131-02	1.200	8.011	554.0
215	.00000	.43000	625.00	.1630	.2016	.2324	.9220	.1184-01	.8304-02	1.626	10.89	554.0
215	.00000	.44000	626.00	.1377	.1695	.1946	.9220	.9918-02	.7016-02	1.402	9.411	549.9
215	.00000	.44500	627.00	.1316	.1619	.1859	.9220	.9474-02	.6706-02	1.343	9.094	549.6
215	.00000	.45000	628.00	.1338	.1643	.1883	.9220	.9597-02	.6818-02	1.377	9.335	547.8
215	.00000	.45500	629.00	.1307	.1604	.1838	.9220	.9364-02	.6660-02	1.349	9.290	547.2
213	.00000	.46000	630.00	.1270	.1583	.1836	.9220	.9365-02	.6477-02	1.228	8.199	559.9
213	.00000	.47000	631.00	.1170	.1456	.1686	.9220	.8600-02	.5969-02	1.141	7.622	558.4
213	.00000	.48000	632.00	.1087	.1354	.1570	.9220	.8005-02	.5542-02	1.053	7.073	559.5
213	.00000	.49000	633.00	.9370-01	.1163	.1346	.9220	.6864-02	.4776-02	.9180	6.232	557.3
213	.00000	.50000	634.00	.1011	.1256	.1453	.9220	.7412-02	.5157-02	.9910	6.896	557.3
213	.00000	.55000	635.00	.1138	.1414	.1636	.9220	.8344-02	.5802-02	1.113	7.353	557.6
213	.00000	.60000	636.00	.9770-01	.1191	.1358	.9220	.6929-02	.4983-02	1.037	6.708	541.3
213	.00000	.65000	637.00	.1178	.1438	.1641	.9220	.8372-02	.6008-02	1.244	8.064	542.4
213	.00000	.70000	638.00	.6970-01	.8500-01	.9680-01	.9220	.4938-02	.3555-02	.7420	5.095	540.7
213	.00000	.75000	639.00	.5710-01	.6960-01	.7930-01	.9220	.4043-02	.2911-02	.6080	3.933	540.6
213	.00000	.80000	640.00	.5220-01	.6300-01	.7130-01	.9220	.3636-02	.2662-02	.5810	3.667	531.3
213	.00000	.85000	641.00	.5330-01	.6430-01	.7270-01	.9220	.3706-02	.2719-02	.5970	3.806	529.9
213	.00000	.87000	643.00	.4670-01	.5640-01	.6380-01	.9220	.3254-02	.2383-02	.5200	3.381	531.1
213	.00000	.88000	644.00	.4490-01	.5420-01	.6140-01	.9220	.3132-02	.2288-02	.4970	3.255	532.4
215	.00000	.89000	645.00	.4150-01	.4990-01	.5630-01	.9220	.2866-02	.2114-02	.4710	3.132	526.9
215	.00000	.95000	649.00	.1280-01	.1530-01	.1710-01	.9220	.8692-03	.6542-03	.1550	1.147	513.4
227	5.6250	.42500	2170.0	.1281	.1618	.1899	.9220	.9681-02	.6529-02	1.169	7.523	568.0
215	11.250	.35000	650.00	.4340-01	.5200-01	.5850-01	.9220	.2979-02	.2210-02	.5010	3.408	523.1
215	11.250	.37000	652.00	.4310-01	.5170-01	.5820-01	.9220	.2965-02	.2194-02	.4930	3.354	524.8
215	11.250	.37500	653.00	.4590-01	.5520-01	.6210-01	.9220	.3167-02	.2341-02	.5250	3.580	525.4
215	11.250	.38000	654.00	.4620-01	.5550-01	.6260-01	.9220	.3191-02	.2353-02	.5240	3.569	527.1
215	11.250	.40500	659.00	.6940-01	.8450-01	.9630-01	.9220	.4908-02	.3537-02	.7400	5.023	540.4
215	11.250	.41500	661.00	.8210-01	.1007	.1152	.9220	.5871-02	.4185-02	.8530	5.732	546.1
215	11.250	.42000	662.00	.9530-01	.1180	.1361	.9220	.6935-02	.4856-02	.9470	6.362	554.7
215	11.250	.42500	663.00	.1037	.1285	.1485	.9220	.7565-02	.5282-02	1.024	6.892	555.9
215	11.250	.43000	664.00	.1088	.1349	.1558	.9220	.7939-02	.5547-02	1.076	7.313	555.7
215	11.250	.44000	665.00	.1081	.1345	.1558	.9220	.7941-02	.5509-02	1.052	7.093	558.8
215	11.250	.45000	666.00	.1136	.1411	.1633	.9220	.8319-02	.5788-02	1.112	7.503	557.6
215	11.250	.45500	667.00	.1095	.1361	.1576	.9220	.8032-02	.5580-02	1.069	7.210	558.2
215	11.250	.46000	668.00	.1094	.1356	.1567	.9220	.7985-02	.5575-02	1.080	7.313	556.0
215	11.250	.47000	669.00	.1018	.1260	.1453	.9220	.7406-02	.5185-02	1.011	6.874	554.7

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN, EXTERNAL TANK HI/HREF

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
215	11.250	.48000	670.00	.9200-01	.1135	.1307	.9220	.6661-02	.4686-02	.9240	6.288	552.6
215	11.250	.49000	671.00	.8250-01	.1014	.1163	.9220	.5928-02	.4203-02	.8440	5.739	548.8
215	11.250	.50000	672.00	.7770-01	.9550-01	.1094	.9220	.5577-02	.3961-02	.7990	5.553	548.0
215	11.250	.70000	674.00	.7280-01	.8830-01	.1002	.9220	.5104-02	.3711-02	.7950	5.438	535.6
215	11.250	.85000	676.00	.5160-01	.6200-01	.6980-01	.9220	.3556-02	.2632-02	.5920	3.807	524.7
215	11.250	.87000	678.00	.4880-01	.5860-01	.6600-01	.9220	.3362-02	.2485-02	.5570	3.632	525.6
215	11.250	.88000	679.00	.4630-01	.5570-01	.6280-01	.9220	.3198-02	.2359-02	.5260	3.466	526.8
215	11.250	.90000	681.00	.2720-01	.3260-01	.3670-01	.9220	.1871-02	.1388-02	.3140	2.143	523.4
215	11.250	.92600	683.00	.1230-01	.1480-01	.1660-01	.9220	.8458-03	.6284-03	.1430	1.060	522.2
215	11.250	.95000	684.00	.1360-01	.1620-01	.1820-01	.9220	.9258-03	.6951-03	.1630	1.198	515.1
215	17.000	.33000	685.00	.4570-01	.5480-01	.6170-01	.9220	.3143-02	.2331-02	.5270	3.587	523.4
215	17.000	.35000	687.00	.4440-01	.5310-01	.5970-01	.9220	.3041-02	.2261-02	.5160	3.510	521.7
227	17.000	.35500	2102.0	.4320-01	.5210-01	.5880-01	.9220	.2999-02	.2203-02	.4840	3.195	527.5
215	17.000	.36000	688.00	.4410-01	.5280-01	.5930-01	.9220	.3023-02	.2248-02	.5130	3.491	521.6
215	17.000	.37000	689.00	.4580-01	.5490-01	.6180-01	.9220	.3147-02	.2333-02	.5280	3.588	523.7
215	17.000	.37500	690.00	.4980-01	.5970-01	.6720-01	.9220	.3427-02	.2536-02	.5710	3.892	524.7
227	17.000	.42500	2171.0	.9470-01	.1165	.1337	.9220	.6818-02	.4826-02	.9620	6.168	547.6
227	17.000	.43000	2176.0	.9860-01	.1217	.1400	.9220	.7139-02	.5027-02	.9900	6.430	550.1
213	17.000	.50000	691.00	.7330-01	.8990-01	.1028	.9220	.5245-02	.3741-02	.7620	5.126	545.7
213	17.000	.60000	692.00	.7850-01	.9470-01	.1070	.9220	.5459-02	.4002-02	.8770	5.702	530.4
213	17.000	.70000	693.00	.6290-01	.7650-01	.8700-01	.9220	.4435-02	.3208-02	.6780	4.620	538.1
213	17.000	.80000	694.00	.5000-01	.6010-01	.6790-01	.9220	.3463-02	.2548-02	.5630	3.574	528.3
227	20.980	.35500	2098.0	.3110-01	.3730-01	.4200-01	.9220	.2141-02	.1584-02	.3550	2.385	523.1
227	20.980	.36000	2099.0	.4390-01	.5290-01	.5970-01	.9220	.3043-02	.2238-02	.4930	3.277	526.8
227	20.980	.36500	2100.0	.4620-01	.5560-01	.6280-01	.9220	.3202-02	.2357-02	.5200	3.461	526.2
227	23.070	.35500	2094.0	.4320-01	.5200-01	.5870-01	.9220	.2995-02	.2203-02	.4860	3.230	526.6
227	23.070	.36000	2095.0	.4550-01	.5480-01	.6190-01	.9220	.3154-02	.2319-02	.5110	3.396	526.8
227	23.070	.36500	2096.0	.4750-01	.5720-01	.6470-01	.9220	.3296-02	.2421-02	.5310	3.530	527.6
227	23.070	.37000	2097.0	-.3640-01	-.2580-01	-.2220-01	.9220	-.1133-02	-.1854-02	.1700	.9740	838.6
226	23.070	.43500	2000.0	.9580-01	.1172	.1341	.9220	.6838-02	.4886-02	.9970	6.405	543.0
226	23.070	.56890	2001.0	.6960-01	.8650-01	.1000+00	.9220	.5103-02	.3550-02	.6800	4.632	555.7
226	23.070	.70270	2002.0	.5520-01	.6780-01	.7770-01	.9220	.3963-02	.2814-02	.5650	4.033	546.2
226	23.070	.83500	2003.0	.4530-01	.5510-01	.6270-01	.9220	.3197-02	.2310-02	.4860	3.102	537.0
226	23.070	.90000	2004.0	.3320-01	.4070-01	.4650-01	.9220	.2374-02	.1693-02	.3440	2.318	543.8
227	23.070	.92600	2154.0	.1110-01	.1360-01	.1560-01	.9220	.7955-03	.5661-03	.1140	.8160	545.0
213	29.800	.70000-01	700.00	.2988	.3655	.3669	.9492	.1871-01	.1524-01	3.129	21.19	544.1
213	29.800	.10000+00	701.00	.2138	.2572	.2674	.9406	.1364-01	.1091-01	2.425	15.61	527.1
213	29.800	.15000	702.00	.1167	.1390	.1506	.9298	.7681-02	.5954-02	1.392	10.12	515.6
213	29.800	.20000	703.00	.6320-01	.7490-01	.8310-01	.9236	.4239-02	.3223-02	.7700	5.221	510.7
213	29.800	.30000	704.00	.4340-01	.5210-01	.5880-01	.9220	.3000-02	.2211-02	.4910	3.517	527.2
213	29.800	.35000	705.00	.5440-01	.6510-01	.7320-01	.9220	.3734-02	.2775-02	.6310	4.378	521.9
227	29.800	.35500	2090.0	.5460-01	.6530-01	.7450-01	.9220	.3801-02	.2784-02	.6070	4.029	529.1
227	29.800	.36500	2092.0	.5050-01	.6090-01	.6890-01	.9220	.3512-02	.2575-02	.5620	3.723	528.7

IH72, OTS CLEAN, EXTERNAL TANK HI/HREF (RVZT36)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
215	29.800	.50000	707.00	.8390-01	.1023	.1165	.9220	.5935-02	.4278-02	.8960	6.152	540.4
215	29.800	.60000	708.00	.7890-01	.9530-01	.1079	.9220	.5499-02	.4019-02	.8740	5.610	532.4
215	29.800	.70000	709.00	.5300-01	.6390-01	.7230-01	.9220	.3682-02	.2701-02	.5930	3.812	530.2
215	29.800	.80000	710.00	.4620-01	.5540-01	.6240-01	.9220	.3180-02	.2355-02	.5310	3.346	524.4
227	31.430	.44000	2166.0	.6620-01	.8040-01	.9130-01	.9220	.4657-02	.3377-02	.7160	4.784	535.0
226	31.430	.47600	2005.0	.9050-01	.1109	.1269	.9220	.6474-02	.4617-02	.9380	6.236	544.0
226	31.430	.51100	2006.0	.8500-01	.1057	.1224	.9220	.6242-02	.4335-02	.8270	5.632	556.4
226	31.430	.54600	2007.0	.5740-01	.7100-01	.8180-01	.9220	.4172-02	.2927-02	.5710	3.999	551.9
226	31.430	.61600	2009.0	.7560-01	.9220-01	.1051	.9220	.5362-02	.3857-02	.8010	5.503	539.5
226	31.430	.65000	2010.0	.5580-01	.6770-01	.7700-01	.9220	.3928-02	.2845-02	.6010	4.203	535.8
226	31.430	.68600	2014.0	.4290-01	.5250-01	.6000-01	.9220	.3061-02	.2187-02	.4470	3.121	542.9
226	31.430	.72050	2015.0	.2430-01	.2990-01	.3430-01	.9220	.1749-02	.1242-02	.2500	1.851	546.2
226	31.430	.79040	2017.0	.4300-01	.5240-01	.5980-01	.9220	.3050-02	.2193-02	.4550	2.885	539.7
226	31.430	.86000	2019.0	.6300-02	.7600-02	.8600-02	.9220	.4411-03	.3194-03	.6700-01	.4380	535.8
226	31.430	.89520	2020.0	.4080-01	.4990-01	.5710-01	.9220	.2910-02	.2079-02	.4240	2.764	543.1
227	31.430	.92600	2153.0	.9300-02	.1140-01	.1300-01	.9220	.6626-03	.4720-03	.9600-01	.6980	544.5
226	33.750	.25000	2079.0	.3030-01	.3670-01	.4160-01	.9220	.2124-02	.1543-02	.3290	2.715	534.1
226	33.750	.30000	2080.0	.4640-01	.5640-01	.6410-01	.9220	.3269-02	.2368-02	.5010	3.314	535.7
226	33.750	.37500	2081.0	.4990-01	.6010-01	.6790-01	.9220	.3464-02	.2544-02	.5580	3.740	527.8
226	33.750	.40000	2082.0	.4930-01	.5960-01	.6750-01	.9220	.3442-02	.2515-02	.5440	3.641	530.8
226	33.750	.45000	2084.0	.8860-01	.1082	.1234	.9220	.6293-02	.4522-02	.9360	6.239	540.0
226	33.750	.60000	2085.0	.8940-01	.1096	.1254	.9220	.6397-02	.4560-02	.9250	6.153	544.2
227	33.750	.92600	2152.0	.5600-02	.6900-02	.7900-02	.9220	.4004-03	.2852-03	.5800-01	.4220	544.5
226	36.320	.25000	2066.0	.3980-01	.4790-01	.5420-01	.9220	.2764-02	.2028-02	.4440	2.973	528.3
226	36.320	.30000	2067.0	.4600-01	.5590-01	.6350-01	.9220	.3240-02	.2344-02	.4940	3.269	536.4
226	36.320	.35000	2069.0	.5370-01	.6480-01	.7340-01	.9220	.3743-02	.2738-02	.5940	3.979	530.1
226	36.320	.37500	2070.0	.5670-01	.6850-01	.7740-01	.9220	.3950-02	.2893-02	.6290	4.217	529.5
226	36.320	.40000	2071.0	.3920-01	.4730-01	.5340-01	.9220	.2725-02	.2002-02	.4390	2.947	527.6
226	36.320	.42000	2072.0	.4090-01	.4930-01	.5570-01	.9220	.2842-02	.2084-02	.4550	3.053	528.6
226	36.320	.42500	2073.0	.4420-01	.5330-01	.6040-01	.9220	.3079-02	.2253-02	.4890	3.279	529.8
226	36.320	.43000	2074.0	.4810-01	.5810-01	.6580-01	.9220	.3355-02	.2453-02	.5310	3.558	530.5
226	36.320	.43500	2075.0	.5430-01	.6580-01	.7470-01	.9220	.3811-02	.2771-02	.5920	3.958	533.5
226	36.320	.45000	2076.0	.7980-01	.9610-01	.1085	.9220	.5536-02	.4070-02	.8960	6.008	527.1
226	36.320	.60000	2077.0	.9790-01	.1200	.1374	.9220	.7011-02	.4994-02	1.012	6.788	544.5
226	36.320	.65000	2078.0	.6590-01	.8040-01	.9170-01	.9220	.4678-02	.3362-02	.6970	4.785	539.9
215	37.700	.50000-01	715.00	.3970	.4933	.4799	.9558	.2445-01	.2023-01	3.883	25.19	557.8
215	37.700	.70000-01	716.00	.2996	.3669	.3682	.9492	.1876-01	.1526-01	3.119	21.30	545.4
215	37.700	.10000+00	717.00	.2068	.2491	.2591	.9406	.1320-01	.1054-01	2.327	15.23	528.9
215	37.700	.15000	718.00	.1116	.1334	.1448	.9298	.7379-02	.5688-02	1.306	9.688	520.2
215	37.700	.20000	719.00	.5750-01	.6840-01	.7590-01	.9236	.3868-02	.2933-02	.6940	4.763	512.9
215	37.700	.30000	720.00	.4280-01	.5130-01	.5780-01	.9220	.2943-02	.2179-02	.4910	3.552	524.5
213	37.700	.35000	721.00	.5570-01	.6660-01	.7490-01	.9220	.3820-02	.2838-02	.6460	4.531	522.0
213	37.700	.50000	723.00	.1305	.1577	.1785	.9220	.9104-02	.6656-02	1.447	10.07	532.0

IH72, OTS CLEAN, EXTERNAL TANK HI/HREF (RVZT36)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
213	37.700	.60000	724.00	.1096	.1323	.1496	.9220	.7630-02	.5590-02	1.222	7.874	530.9
213	37.700	.70000	725.00	.4880-01	.5920-01	.6720-01	.9220	.3429-02	.2490-02	.5320	3.400	535.8
213	37.700	.80000	726.00	.3660-01	.4410-01	.4980-01	.9220	.2538-02	.1869-02	.4140	2.626	528.0
213	37.700	.87000	727.00	.4130-01	.5000-01	.5660-01	.9220	.2887-02	.2106-02	.4550	2.928	533.4
214	39.000	.25000-01	994.00	.4589	.6006	.5551	.9633	.2830-01	.2340-01	3.716	24.73	590.5
226	45.000	.25000	2036.0	.2660-01	.3240-01	.3680-01	.9220	.1878-02	.1357-02	.2860	2.322	536.8
226	45.000	.30000	2037.0	.4000-03	.5000-03	.6000-03	.9220	.2896-04	.2098-04	.4000-02	.3100-01	535.6
226	45.000	.32500	2038.0	.5750-01	.6970-01	.7900-01	.9220	.4029-02	.2935-02	.6300	4.342	532.5
226	45.000	.35000	2039.0	.6280-01	.7590-01	.8590-01	.9220	.4383-02	.3202-02	.6930	4.707	530.8
226	45.000	.37500	2040.0	.5290-01	.6380-01	.7220-01	.9220	.3682-02	.2699-02	.5890	4.007	528.9
226	45.000	.40000	2041.0	.6390-01	.7730-01	.8750-01	.9220	.4465-02	.3261-02	.7050	4.790	531.0
226	45.000	.43000	2044.0	.8310-01	.1010	.1149	.9220	.5860-02	.4240-02	.8940	6.058	536.3
226	45.000	.44000	2046.0	.8490-01	.1032	.1175	.9220	.5993-02	.4328-02	.9080	6.152	537.3
226	45.000	.45000	2047.0	.8480-01	.1030	.1172	.9220	.5978-02	.4323-02	.9100	6.203	536.6
226	45.000	.47000	2048.0	.8030-01	.9770-01	.1113	.9220	.5676-02	.4096-02	.8570	5.896	537.8
226	45.000	.55000	2049.0	.9210-01	.1137	.1308	.9220	.6673-02	.4696-02	.9230	6.329	550.5
226	45.000	.60000	2050.0	.9640-01	.1182	.1354	.9220	.6904-02	.4917-02	.9960	6.720	544.6
226	45.000	.65000	2051.0	.8700-01	.1066	.1220	.9220	.6221-02	.4438-02	.9020	6.018	543.8
226	45.000	.75000	2052.0	.2260-01	.2770-01	.3170-01	.9220	.1619-02	.1152-02	.2330	1.481	545.1
226	45.000	.80000	2053.0	.3980-01	.4830-01	.5500-01	.9220	.2803-02	.2030-02	.4290	2.711	535.8
226	45.000	.83000	2054.0	.4290-01	.5220-01	.5950-01	.9220	.3037-02	.2186-02	.4550	2.860	539.1
226	45.000	.84000	2055.0	.4140-01	.5040-01	.5740-01	.9220	.2929-02	.2111-02	.4410	2.774	538.4
226	45.000	.85000	2056.0	.3890-01	.4740-01	.5400-01	.9220	.2755-02	.1985-02	.4140	2.642	538.6
226	45.000	.86000	2057.0	.3660-01	.4460-01	.5090-01	.9220	.2595-02	.1868-02	.3890	2.540	539.0
226	45.000	.87000	2058.0	.3450-01	.4210-01	.4810-01	.9220	.2452-02	.1759-02	.3630	2.426	540.7
226	45.000	.88000	2059.0	.3130-01	.3840-01	.4400-01	.9220	.2243-02	.1595-02	.3220	2.144	545.5
226	45.000	.89000	2060.0	.3250-01	.4000-01	.4600-01	.9220	.2347-02	.1656-02	.3280	2.187	549.1
226	45.000	.90000	2061.0	.1610-01	.1990-01	.2290-01	.9220	.1166-02	.8212-03	.1620	1.082	550.1
226	45.000	.91000	2062.0	.2650-01	.3220-01	.3660-01	.9220	.1868-02	.1351-02	.2840	2.338	536.5
226	45.000	.92600	2063.0	.1360-01	.1690-01	.1950-01	.9220	.9939-03	.6945-03	.1340	.9450	553.7
226	45.000	.93500	2064.0	.2250-01	.2790-01	.3220-01	.9220	.1642-02	.1149-02	.2230	1.661	552.9
226	45.000	.94500	2065.0	.2550-01	.3110-01	.3540-01	.9220	.1808-02	.1303-02	.2720	1.812	538.5
213	180.00	.15000-01	2182.0	.6281	1.085	.9021	.9639	.4601-01	.3203-01	2.852	20.27	660.4
213	180.00	.20000-01	2183.0	.5528	.7881	.7102	.9629	.3622-01	.2819-01	3.539	25.86	624.0
213	180.00	.25000-01	2184.0	.3818	.4579	.4355	.9629	.2221-01	.1947-01	4.387	32.37	524.1
213	180.00	.40000-01	737.00	.4110	.4929	.4759	.9590	.2427-01	.2096-01	4.728	31.21	523.9
213	180.00	.45000-01	738.00	.5158	.6602	.6347	.9572	.3237-01	.2630-01	4.504	29.36	578.2
213	180.00	.60000-01	739.00	.4508	.5691	.5630	.9520	.2872-01	.2299-01	4.144	27.55	569.2
213	180.00	.70000-01	740.00	.3355	.4206	.4231	.9488	.2158-01	.1711-01	3.170	21.25	564.2
213	180.00	.80000-01	741.00	.3543	.4410	.4503	.9458	.2297-01	.1807-01	3.445	24.89	558.8
213	180.00	.10000+00	742.00	.2457	.3010	.3148	.9403	.1606-01	.1253-01	2.557	17.09	545.5
213	180.00	.12500	743.00	.1842	.2239	.2401	.9344	.1224-01	.9395-02	1.986	14.50	538.1
213	180.00	.15000	744.00	.1540	.1857	.2028	.9296	.1034-01	.7853-02	1.721	12.07	530.3

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
213	180.00	.17500	745.00	.1136	.1361	.1504	.9260	.7670-02	.5794-02	1.313	9.992	522.8
213	180.00	.20000	746.00	.1391	.1654	.1837	.9235	.9372-02	.7096-02	1.675	12.19	513.4
213	180.00	.21500	747.00	.5010-01	.6070-01	.6860-01	.9226	.3498-02	.2556-02	.5500	3.839	534.1
213	180.00	.23000	748.00	.4090-01	.4970-01	.5640-01	.9221	.2877-02	.2088-02	.4450	3.305	536.4
213	180.00	.24000	749.00	.2730-01	.3330-01	.3800-01	.9220	.1936-02	.1390-02	.2880	2.178	542.2
213	180.00	.25000	750.00	.1360-01	.1660-01	.1890-01	.9220	.9622-03	.6939-03	.1450	1.181	539.8
213	180.00	.35000	752.00	.4250-01	.5110-01	.5760-01	.9220	.2940-02	.2167-02	.4820	3.075	527.2
213	180.00	.40000	753.00	.4870-01	.5830-01	.6550-01	.9220	.3341-02	.2485-02	.5670	3.692	521.3
213	180.00	.50000	754.00	.5630-01	.6730-01	.7550-01	.9220	.3853-02	.2869-02	.6570	4.356	520.5
213	180.00	.60000	755.00	.4440-01	.5350-01	.6050-01	.9220	.3084-02	.2264-02	.4980	3.220	529.6
213	180.00	.70000	756.00	.4730-01	.5680-01	.6400-01	.9220	.3266-02	.2411-02	.5380	3.591	526.1
213	180.00	.80000	757.00	.3700-01	.4450-01	.5020-01	.9220	.2560-02	.1888-02	.4210	2.664	526.6
213	180.00	.90000	758.00	.1460-01	.1790-01	.2040-01	.9220	.1040-02	.7456-03	.1540	.9980	542.8
213	235.00	.22000	759.00	.4220-01	.5120-01	.5800-01	.9224	.2956-02	.2153-02	.4610	3.449	535.4
213	235.00	.25000	760.00	.1690-01	.2040-01	.2320-01	.9220	.1183-02	.8608-03	.1850	1.456	534.8
213	235.00	.30000	762.00	.4610-01	.5590-01	.6350-01	.9220	.3238-02	.2352-02	.5020	3.036	535.9
213	235.00	.32000	763.00	.6180-01	.7500-01	.8510-01	.9220	.4341-02	.3153-02	.6740	4.009	535.8
213	235.00	.34000	764.00	.6790-01	.8220-01	.9320-01	.9220	.4752-02	.3463-02	.7470	4.458	533.9
213	235.00	.36000	765.00	.7330-01	.8900-01	.1012	.9220	.5160-02	.3737-02	.7920	4.785	537.5
213	235.00	.38000	766.00	.8530-01	.1042	.1189	.9220	.6063-02	.4351-02	.9010	5.486	542.5
215	247.00	.23000	768.00	.4250-01	.5150-01	.5830-01	.9221	.2972-02	.2167-02	.4680	3.502	534.0
215	247.00	.25000	769.00	.1880-01	.2260-01	.2540-01	.9220	.1296-02	.9563-03	.2130	1.675	526.8
215	247.00	.27000	770.00	.2210-01	.2670-01	.3010-01	.9220	.1536-02	.1127-02	.2470	1.819	530.3
215	247.00	.30000	772.00	.6900-01	.8380-01	.9530-01	.9220	.4856-02	.3515-02	.7440	4.571	538.0
215	247.00	.31000	773.00	.7740-01	.9420-01	.1071	.9220	.5459-02	.3945-02	.8320	5.064	538.9
215	247.00	.32000	774.00	.8800-01	.1077	.1231	.9220	.6273-02	.4482-02	.9180	5.524	545.0
215	247.00	.32500	775.00	.9680-01	.1192	.1369	.9220	.6978-02	.4934-02	.9850	5.928	550.1
215	247.00	.33000	776.00	.1039	.1289	.1489	.9220	.7587-02	.5296-02	1.026	6.171	556.1
215	247.00	.33500	777.00	.1125	.1406	.1636	.9220	.8335-02	.5731-02	1.073	6.433	562.6
215	247.00	.34000	778.00	.1191	.1491	.1736	.9220	.8846-02	.6068-02	1.130	6.775	563.5
215	247.00	.34500	779.00	.1311	.1650	.1929	.9220	.9828-02	.6683-02	1.221	7.327	567.0
215	247.00	.35000	780.00	.1384	.1731	.2013	.9220	.1026-01	.7050-02	1.318	7.948	562.8
215	247.00	.35500	781.00	.1200-02	.1400-02	.1600-02	.9220	.8093-04	.5906-04	.1300-01	.7800-01	533.3
213	247.00	.36000	782.00	.1314	.1627	.1878	.9220	.9576-02	.6704-02	1.306	7.931	554.6
213	247.00	.36500	783.00	.1168	.1432	.1640	.9220	.8366-02	.5956-02	1.208	7.345	546.6
213	247.00	.37000	784.00	.9760-01	.1188	.1353	.9220	.6899-02	.4976-02	1.043	6.400	539.8
213	247.00	.38000	786.00	.8300-01	.1005	.1140	.9220	.5816-02	.4233-02	.9090	5.655	534.6
213	247.00	.39000	787.00	.7650-01	.9240-01	.1045	.9220	.5332-02	.3900-02	.8490	5.299	531.8
213	247.00	.40000	788.00	.7070-01	.8550-01	.9690-01	.9220	.4943-02	.3605-02	.7790	4.898	533.5
214	247.00	.50000	789.00	.3790-01	.4510-01	.5060-01	.9220	.2578-02	.1931-02	.4500	2.929	516.4
214	247.00	.60000	790.00	.3130-01	.3800-01	.4310-01	.9220	.2198-02	.1595-02	.3400	2.240	536.4
214	247.00	.70000	791.00	.3760-01	.4620-01	.5290-01	.9220	.2698-02	.1917-02	.3870	2.733	547.4
214	247.00	.90000	793.00	.1130-01	.1410-01	.1650-01	.9220	.8418-03	.5745-03	.1060	.6750	565.3

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN, EXTERNAL TANK HI/HREF

(RVZT36)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
227	247.00	.92600	2144.0	.3100-02	.3800-02	.4400-02	.9220	.2260-03	.1568-03	.3000-01	.2080	556.8
227	247.00	.93000	2149.0	.1160-01	.1450-01	.1680-01	.9220	.8555-03	.5921-03	.1120	.8050	557.8
227	250.57	.92600	2143.0	.5300-02	.6600-02	.7600-02	.9220	.3878-03	.2686-03	.5100-01	.3540	557.5
227	250.57	.93000	2148.0	.2200-01	.2750-01	.3200-01	.9220	.1631-02	.1122-02	.2090	1.469	560.4
227	250.57	.93700	2087.0	.1410-01	.1720-01	.1970-01	.9220	.1006-02	.7178-03	.1460	1.044	543.4
214	258.00	.27000	794.00	.2130-01	.2610-01	.2990-01	.9220	.1523-02	.1084-02	.2200	1.565	546.8
214	258.00	.29000	795.00	.6080-01	.7540-01	.8720-01	.9220	.4446-02	.3099-02	.5980	3.668	556.3
225	258.00	.32000	798.00	.1642	.2147	.2593	.9220	.1321-01	.8368-02	1.330	7.854	588.4
225	258.00	.34000	802.00	.2061	.2692	.3248	.9220	.1655-01	.1051-01	1.677	9.931	587.7
225	258.00	.34500	803.00	.1876	.2409	.2864	.9220	.1459-01	.9561-02	1.616	9.644	578.3
225	258.00	.35500	805.00	.1218	.1525	.1775	.9220	.9047-02	.6209-02	1.154	6.942	561.5
225	258.00	.36000	806.00	.9250-01	.1149	.1328	.9220	.6770-02	.4714-02	.9050	5.476	555.4
225	258.00	.36500	807.00	.8320-01	.1031	.1189	.9220	.6062-02	.4240-02	.8230	4.998	553.3
225	258.00	.37000	808.00	.8280-01	.1025	.1184	.9220	.6034-02	.4218-02	.8170	4.976	553.6
225	258.00	.37500	809.00	.8490-01	.1052	.1215	.9220	.6192-02	.4328-02	.8380	5.106	553.7
225	258.00	.38000	810.00	.7850-01	.9710-01	.1119	.9220	.5702-02	.4001-02	.7820	4.792	551.9
214	258.00	.40000	812.00	.5370-01	.6530-01	.7440-01	.9220	.3791-02	.2736-02	.5750	3.556	539.2
227	258.00	.93500	2151.0	.3140-01	.3910-01	.4540-01	.9220	.2312-02	.1600-02	.3020	2.124	558.0
214	270.00	.40000-01	985.00	.3618	.4598	.4380	.9592	.2233-01	.1844-01	3.240	20.80	573.6
214	270.00	.50000-01	986.00	.4094	.5179	.5029	.9556	.2564-01	.2087-01	3.733	23.86	570.5
214	270.00	.60000-01	987.00	.3822	.4758	.4706	.9522	.2400-01	.1949-01	3.711	24.28	558.9
214	270.00	.70000-01	988.00	.3145	.3906	.3925	.9490	.2001-01	.1604-01	3.085	20.63	557.0
214	270.00	.80000-01	989.00	.2648	.3269	.3332	.9460	.1699-01	.1350-01	2.664	18.83	552.0
214	270.00	.10000+00	990.00	.2220	.2703	.2820	.9404	.1438-01	.1132-01	2.372	15.53	539.7
214	270.00	.15000	991.00	.1176	.1422	.1554	.9297	.7924-02	.5995-02	1.297	9.588	533.0
214	270.00	.20000	992.00	.6960-01	.8340-01	.9310-01	.9236	.4745-02	.3550-02	.8070	5.525	522.0
214	270.00	.23000	813.00	.4060-01	.4940-01	.5620-01	.9221	.2866-02	.2072-02	.4370	3.187	538.6
214	270.00	.24000	814.00	.3080-01	.3760-01	.4290-01	.9220	.2190-02	.1572-02	.3260	2.643	542.0
214	270.00	.25000	815.00	.1780-01	.2170-01	.2470-01	.9220	.1261-02	.9080-03	.1900	1.501	540.4
214	270.00	.27000	816.00	.1920-01	.2350-01	.2690-01	.9220	.1369-02	.9805-03	.2020	1.438	543.4
214	270.00	.29000	817.00	.1016	.1284	.1506	.9220	.7679-02	.5181-02	.9310	5.719	569.6
214	270.00	.30000	818.00	.2437	.3143	.3751	.9220	.1912-01	.1243-01	2.073	12.45	582.5
214	270.00	.31000	819.00	.2597	.3348	.3995	.9220	.2037-01	.1324-01	2.212	13.17	582.3
214	270.00	.32000	820.00	.2413	.3101	.3690	.9220	.1881-01	.1230-01	2.078	12.35	580.4
214	270.00	.32500	821.00	.2285	.2949	.3521	.9220	.1795-01	.1165-01	1.940	11.49	582.8
214	270.00	.33000	822.00	.2417	.3142	.3776	.9220	.1925-01	.1232-01	2.002	11.86	586.9
214	270.00	.33500	823.00	.2936	.3874	.4717	.9220	.2405-01	.1497-01	2.316	13.71	594.6
214	270.00	.34500	825.00	.2243	.2785	.3222	.9220	.1643-01	.1143-01	2.199	13.22	557.0
214	270.00	.35000	828.00	.1243	.1539	.1774	.9220	.9046-02	.6340-02	1.238	7.440	554.0
214	270.00	.37000	830.00	.2110-01	.2570-01	.2920-01	.9220	.1490-02	.1077-02	.2270	1.384	538.3
214	270.00	.37500	831.00	.1063	.1310	.1507	.9220	.7685-02	.5418-02	1.073	6.526	551.2
214	270.00	.38000	832.00	.8470-01	.1039	.1189	.9220	.6061-02	.4320-02	.8790	5.361	545.8
214	270.00	.39000	833.00	.6880-01	.8380-01	.9560-01	.9220	.4872-02	.3507-02	.7320	4.523	540.7

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN, EXTERNAL TANK HI/HREF

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
214	270.00	.40000	834.00	.7160-01	.8720-01	.9930-01	.9220	.5064-02	.3649-02	.7630	4.731	540.2
214	270.00	.50000	835.00	.2310-01	.2800-01	.3180-01	.9220	.1622-02	.1176-02	.2500	1.589	536.6
214	270.00	.60000	836.00	.4940-01	.6030-01	.6880-01	.9220	.3510-02	.2521-02	.5230	3.490	541.9
214	270.00	.70000	837.00	.4360-01	.5380-01	.6190-01	.9220	.3156-02	.2224-02	.4400	3.091	551.5
214	270.00	.80000	838.00	.6700-01	.8230-01	.9420-01	.9220	.4804-02	.3418-02	.6920	4.302	546.8
214	270.00	.90000	839.00	.2720-01	.3380-01	.3910-01	.9220	.1996-02	.1387-02	.2660	1.689	557.8
227	270.00	.92600	2141.0	.2070-01	.2560-01	.2960-01	.9220	.1508-02	.1054-02	.2040	1.393	553.3
227	270.00	.93000	2146.0	.2610-01	.3240-01	.3750-01	.9220	.1913-02	.1332-02	.2560	1.797	555.2
227	270.00	.93500	2150.0	.3240-01	.4000-01	.4610-01	.9220	.2352-02	.1650-02	.3220	2.269	551.8
227	289.43	.92600	2140.0	.4910-01	.6040-01	.6930-01	.9220	.3531-02	.2503-02	.5010	3.506	546.9
227	289.43	.93000	2145.0	.5450-01	.6710-01	.7710-01	.9220	.3930-02	.2777-02	.5510	3.928	548.5
214	292.50	.23000	840.00	.4260-01	.5180-01	.5900-01	.9221	.3006-02	.2170-02	.4560	3.686	539.4
214	292.50	.25000	R41.00	.1900-01	.2310-01	.2630-01	.9220	.1340-02	.9683-03	.2040	1.588	538.7
214	292.50	.35000	845.00	.1649	.2065	.2406	.9220	.1227-01	.8406-02	1.561	9.486	563.6
214	292.50	.37000	846.00	.9800-01	.1196	.1363	.9220	.6951-02	.4997-02	1.039	6.420	541.4
214	292.50	.40000	847.00	.7080-01	.8560-01	.9690-01	.9220	.4942-02	.3611-02	.7840	4.919	532.3
214	292.50	.45000	848.00	.4370-01	.5260-01	.5930-01	.9220	.3025-02	.2228-02	.4940	3.133	527.7
214	292.50	.60000	851.00	.3490-01	.4240-01	.4830-01	.9220	.2460-02	.1781-02	.3770	2.536	537.8
214	292.50	.65000	852.00	.6600-01	.8070-01	.9230-01	.9220	.4705-02	.3364-02	.6900	4.699	544.3
214	292.50	.70000	853.00	.8690-01	.1079	.1248	.9220	.6361-02	.4428-02	.8520	5.949	556.9
214	292.50	.75000	854.00	.6410-01	.7910-01	.9110-01	.9220	.4643-02	.3270-02	.6460	4.182	551.7
214	292.50	.80000	855.00	.8410-01	.1029	.1177	.9220	.6003-02	.4287-02	.8760	5.706	544.9
227	292.50	.82000	2129.0	.8920-01	.1088	.1240	.9220	.6322-02	.4547-02	.9430	5.803	539.6
227	292.50	.83000	2130.0	.8930-01	.1092	.1246	.9220	.6354-02	.4555-02	.9380	5.810	541.2
227	292.50	.85000	2132.0	.9070-01	.1109	.1266	.9220	.6455-02	.4626-02	.9510	5.926	541.4
227	292.50	.86000	2133.0	.9070-01	.1109	.1267	.9220	.6461-02	.4625-02	.9480	5.874	542.0
227	292.50	.87000	2134.0	.8840-01	.1083	.1239	.9220	.6317-02	.4508-02	.9170	5.711	543.5
227	292.50	.88000	2135.0	.8720-01	.1070	.1226	.9220	.6252-02	.4446-02	.8970	5.578	545.3
227	292.50	.89000	2136.0	.7990-01	.9820-01	.1127	.9220	.5744-02	.4075-02	.8170	5.092	546.6
214	292.50	.90000	856.00	.6340-01	.7800-01	.8960-01	.9220	.4567-02	.3232-02	.6460	4.185	549.4
227	292.50	.92600	2138.0	.4800-01	.5900-01	.6770-01	.9220	.3451-02	.2445-02	.4880	3.416	547.2
227	292.50	.93000	2139.0	.5180-01	.6370-01	.7320-01	.9220	.3735-02	.2639-02	.5240	3.757	548.5
227	301.50	.82000	2116.0	.5430-01	.6620-01	.7550-01	.9220	.3851-02	.2769-02	.5740	3.533	539.6
227	301.50	.83000	2117.0	.5670-01	.6910-01	.7880-01	.9220	.4019-02	.2891-02	.6000	3.671	539.5
227	301.50	.83500	2118.0	.5680-01	.6930-01	.7900-01	.9220	.4028-02	.2896-02	.6010	3.644	539.7
227	301.50	.84000	2119.0	.5790-01	.7070-01	.8060-01	.9220	.4112-02	.2954-02	.6110	3.738	540.1
227	301.50	.85000	2120.0	.5940-01	.7250-01	.8280-01	.9220	.4221-02	.3030-02	.6260	3.837	540.5
227	301.50	.86000	2021.0	.5550-01	.6790-01	.7770-01	.9220	.3960-02	.2829-02	.5780	3.556	542.9
227	301.50	.87000	2122.0	.6770-01	.8280-01	.9470-01	.9220	.4828-02	.3452-02	.7060	4.337	542.5
227	301.50	.88000	2123.0	.6050-01	.7430-01	.8510-01	.9220	.4340-02	.3087-02	.6230	3.842	545.2
227	301.50	.89000	2124.0	.5990-01	.7360-01	.8440-01	.9220	.4302-02	.3055-02	.6140	3.820	545.9
227	301.50	.90000	2125.0	.4580-01	.5630-01	.6460-01	.9220	.3291-02	.2336-02	.4690	2.938	546.4
227	301.50	.92600	2127.0	.4560-01	.5610-01	.6450-01	.9220	.3290-02	.2322-02	.4600	2.882	548.8

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
227	301.50	.93500	2128.0	.5050-01	.6220-01	.7140-01	.9220	.3641-02	.2574-02	.5120	3.449	548.1
227	305.40	.83000	2114.0	.5000-01	.6100-01	.6950-01	.9220	.3545-02	.2549-02	.5290	3.235	539.6
227	305.40	.83500	2115.0	.4840-01	.5900-01	.6740-01	.9220	.3434-02	.2465-02	.5090	3.140	540.5
214	305.40	.84000	857.00	.4820-01	.5880-01	.6720-01	.9220	.3425-02	.2457-02	.5080	3.145	542.6
225	305.40	.85000	858.00	.4700-01	.5790-01	.6660-01	.9220	.3396-02	.2394-02	.4730	2.937	549.7
225	305.40	.86000	859.00	.4850-01	.5980-01	.6880-01	.9220	.3507-02	.2470-02	.4870	3.044	550.3
225	305.40	.87000	860.00	.4870-01	.6030-01	.6950-01	.9220	.3539-02	.2484-02	.4860	3.046	551.8
225	305.40	.88000	861.00	.4830-01	.5960-01	.6870-01	.9220	.3502-02	.2460-02	.4820	3.022	551.4
225	305.40	.89000	862.00	.4860-01	.6000-01	.6910-01	.9220	.3521-02	.2475-02	.4850	3.061	551.2
225	305.40	.90000	863.00	.4420-01	.5450-01	.6260-01	.9220	.3191-02	.2252-02	.4460	2.834	549.1
225	305.40	.91000	864.00	.2670-01	.3270-01	.3740-01	.9220	.1904-02	.1361-02	.2780	2.023	543.2
225	305.40	.92600	865.00	.3370-01	.4150-01	.4780-01	.9220	.2434-02	.1717-02	.3400	2.459	549.5
225	309.30	.80000	866.00	.3620-01	.4450-01	.5100-01	.9220	.2600-02	.1847-02	.3720	2.337	546.1
225	309.30	.81000	867.00	.3570-01	.4390-01	.5050-01	.9220	.2572-02	.1818-02	.3620	2.258	548.5
225	309.30	.83000	869.00	.3030-01	.3730-01	.4270-01	.9220	.2177-02	.1547-02	.3110	1.952	546.0
225	315.00	.50000-01	871.00	.4055	.5118	.4971	.9557	.2533-01	.2067-01	3.718	23.53	567.4
225	315.00	.60000-01	872.00	.3420	.4286	.4237	.9523	.2159-01	.1743-01	3.220	21.22	562.5
214	315.00	.70000-01	873.00	.3109	.3840	.3855	.9491	.1966-01	.1585-01	3.119	21.15	552.6
214	315.00	.15000	876.00	.1174	.1421	.1552	.9298	.7914-02	.5987-02	1.293	9.528	533.3
214	315.00	.20000	877.00	.6180-01	.7420-01	.8300-01	.9236	.4233-02	.3151-02	.7050	4.807	525.4
214	315.00	.35000	878.00	.6350-01	.7700-01	.8750-01	.9220	.4462-02	.3236-02	.6880	4.301	536.6
214	315.00	.55000	881.00	.9280-01	.1151	.1330	.9220	.6780-02	.4734-02	.9170	6.081	555.6
214	315.00	.60000	882.00	.1008	.1248	.1439	.9220	.7336-02	.5140-02	1.003	6.719	554.1
214	315.00	.65000	883.00	.8840-01	.1091	.1256	.9220	.6402-02	.4507-02	.8900	6.059	551.8
214	315.00	.70000	884.00	.5810-01	.7160-01	.8230-01	.9220	.4197-02	.2960-02	.5870	4.165	551.0
214	315.00	.75000	885.00	.2300-01	.2820-01	.3230-01	.9220	.1646-02	.1172-02	.2380	1.501	546.2
214	315.00	.80000	886.00	.3090-01	.3760-01	.4280-01	.9220	.2180-02	.1577-02	.3330	2.104	538.0
214	315.00	.84000	887.00	.3910-01	.4760-01	.5420-01	.9220	.2762-02	.1994-02	.4190	2.645	539.1
225	315.00	.85000	888.00	.3610-01	.4440-01	.5110-01	.9220	.2602-02	.1839-02	.3660	2.317	548.5
225	315.00	.87000	890.00	.3270-01	.4040-01	.4640-01	.9220	.2364-02	.1669-02	.3310	2.100	549.1
225	315.00	.88000	891.00	.3100-01	.3820-01	.4400-01	.9220	.2242-02	.1580-02	.3120	1.989	550.1
225	315.00	.89000	892.00	.3080-01	.3800-01	.4370-01	.9220	.2225-02	.1570-02	.3110	2.019	549.4
225	315.00	.90000	893.00	.2060-01	.2540-01	.2920-01	.9220	.1488-02	.1052-02	.2090	1.377	548.3
225	315.00	.91000	894.00	.1110-01	.1350-01	.1550-01	.9220	.7883-03	.5641-03	.1160	.8450	542.4
225	315.00	.92600	895.00	.1480-01	.1830-01	.2100-01	.9220	.1072-02	.7548-03	.1490	1.080	550.2
225	322.30	.42000	897.00	.4620-01	.5630-01	.6410-01	.9220	.3267-02	.2352-02	.4900	3.161	539.2
225	322.30	.43500	898.00	.6820-01	.8340-01	.9520-01	.9220	.4854-02	.3474-02	.7130	4.464	542.2
225	322.30	.45000	899.00	.9060-01	.1117	.1285	.9220	.6549-02	.4618-02	.9130	5.967	549.6
225	322.30	.50000	900.00	.1290	.1614	.1878	.9220	.9570-02	.6577-02	1.226	8.105	561.0
225	322.30	.60000	901.00	.1088	.1361	.1584	.9220	.8071-02	.5543-02	1.031	6.800	561.3
225	322.30	.70000	902.00	.4720-01	.5820-01	.6700-01	.9220	.3415-02	.2406-02	.4740	3.232	550.1
227	324.45	.41000	2110.0	.3880-01	.4680-01	.5300-01	.9220	.2701-02	.1979-02	.4320	2.744	529.0
227	324.45	.92600	2164.0	.4600-02	.5600-02	.6400-02	.9220	.3277-03	.2331-03	.4700-01	.3350	545.2

IH72, OTS CLEAN, EXTERNAL TANK HI/HREF (RVZT36)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
227	326.85	.40500	2108.0	.4800-01	.5800-01	.6570-01	.9220	.3349-02	.2449-02	.5310	3.372	530.3
226	326.85	.44000	2021.0	.6490-01	.7880-01	.8960-01	.9220	.4568-02	.3308-02	.6990	4.468	535.8
226	326.85	.54600	2024.0	.4370-01	.5450-01	.6320-01	.9220	.3222-02	.2230-02	.4220	2.812	557.9
226	326.85	.58100	2025.0	.9280-01	.1155	.1338	.9220	.6827-02	.4732-02	.8990	6.254	557.2
226	326.85	.61600	2026.0	.8150-01	.1004	.1154	.9220	.5886-02	.4156-02	.8240	5.720	548.9
226	326.85	.65200	2027.0	.5980-01	.7310-01	.8360-01	.9220	.4262-02	.3048-02	.6230	4.344	542.5
226	326.85	.68600	2028.0	.4320-01	.5300-01	.6070-01	.9220	.3095-02	.2201-02	.4440	3.121	545.2
226	326.85	.72260	2029.0	.2610-01	.3210-01	.3690-01	.9220	.1884-02	.1331-02	.2640	1.839	548.8
226	326.85	.75790	2030.0	.1660-01	.2040-01	.2340-01	.9220	.1194-02	.8471-03	.1700	1.086	546.7
226	326.85	.79310	2031.0	.4260-01	.5220-01	.5980-01	.9220	.3049-02	.2175-02	.4420	2.775	543.8
226	326.85	.82830	2032.0	.4320-01	.5270-01	.6020-01	.9220	.3069-02	.2203-02	.4550	2.882	540.7
226	326.85	.86350	2033.0	.4170-01	.5090-01	.5800-01	.9220	.2957-02	.2127-02	.4420	2.778	539.5
226	326.85	.90000	2034.0	.4440-01	.5440-01	.6230-01	.9220	.3176-02	.2266-02	.4610	2.869	543.7
227	326.85	.92600	2163.0	.6300-02	.7800-02	.8900-02	.9220	.4541-03	.3232-03	.6500-01	.4650	545.0
226	326.85	.93390	2035.0	.1510-01	.1860-01	.2140-01	.9220	.1094-02	.7717-03	.1530	1.023	549.1
227	330.20	.40000	2104.0	.6170-01	.7470-01	.8470-01	.9220	.4318-02	.3144-02	.6740	4.279	532.6
227	330.20	.40500	2105.0	.5650-01	.6830-01	.7740-01	.9220	.3947-02	.2882-02	.6220	3.951	531.2
227	330.20	.41000	2106.0	.5480-01	.6640-01	.7530-01	.9220	.3838-02	.2792-02	.5970	3.778	533.2
225	330.20	.42000	905.00	.4900-01	.5990-01	.6830-01	.9220	.3483-02	.2499-02	.5160	3.336	540.9
225	330.20	.43500	906.00	.6300-01	.7730-01	.8860-01	.9220	.4514-02	.3210-02	.6480	4.207	545.4
225	330.20	.45000	907.00	.7550-01	.9280-01	.1065	.9220	.5428-02	.3847-02	.7700	5.023	547.2
225	330.20	.50000	908.00	.7510-01	.9350-01	.1083	.9220	.5521-02	.3826-02	.7260	5.169	557.4
225	330.20	.60000	909.00	.7820-01	.9700-01	.1121	.9220	.5711-02	.3985-02	.7680	5.009	554.5
225	330.20	.70000	910.00	.4860-01	.6000-01	.6910-01	.9220	.3522-02	.2477-02	.4870	3.274	550.9
225	330.20	.80000	911.00	.3180-01	.3910-01	.4480-01	.9220	.2281-02	.1622-02	.3280	2.101	545.4
225	330.20	.87000	912.00	.6200-02	.7500-02	.8500-02	.9220	.4357-03	.3161-03	.6700-01	.4320	534.9
227	330.20	.92600	2162.0	.8400-02	.1030-01	.1180-01	.9220	.6040-03	.4302-03	.8700-01	.6180	544.6
227	334.98	.92600	2161.0	.1030-01	.1260-01	.1450-01	.9220	.7370-03	.5254-03	.1070	.7540	544.1
225	334.98	.93500	913.00	.1410-01	.1710-01	.1950-01	.9220	.9940-03	.7174-03	.1500	1.097	537.9
225	337.50	.40000-01	915.00	.4387	.5571	.5307	.9592	.2705-01	.2236-01	3.931	24.61	571.5
225	337.50	.50000-01	916.00	.4028	.5082	.4936	.9557	.2515-01	.2052-01	3.695	23.59	567.3
225	337.50	.70000-01	918.00	.2597	.3158	.3170	.9491	.1616-01	.1323-01	2.782	19.44	537.1
225	337.50	.80000-01	919.00	.2647	.3270	.3333	.9460	.1698-01	.1349-01	2.643	18.00	551.3
225	337.50	.10000+00	920.00	.2013	.2462	.2571	.9405	.1310-01	.1026-01	2.101	14.07	542.5
225	337.50	.15000	921.00	.1130	.1373	.1503	.9298	.7659-02	.5760-02	1.219	8.885	535.7
225	337.50	.20000	922.00	.5950-01	.7190-01	.8080-01	.9236	.4118-02	.3033-02	.6570	4.416	530.5
225	337.50	.42000	923.00	.8030-01	.9920-01	.1142	.9220	.5822-02	.4094-02	.8040	5.236	550.9
227	337.50	.42500	2167.0	.9000-01	.1102	.1260	.9220	.6424-02	.4588-02	.9350	6.043	543.2
227	337.50	.43000	2172.0	.8000-03	.9000-03	.1100-02	.9220	.5359-04	.3887-04	.8000-02	.5400-01	534.9
225	337.50	.43500	924.00	.8740-01	.1081	.1246	.9220	.6351-02	.4456-02	.8710	5.681	552.0
225	337.50	.85000	926.00	.3960-01	.4870-01	.5570-01	.9220	.2841-02	.2021-02	.4080	2.640	545.4
225	337.50	.86000	927.00	.3890-01	.4780-01	.5470-01	.9220	.2789-02	.1985-02	.4010	2.602	545.3
225	337.50	.87000	928.00	.3830-01	.4690-01	.5370-01	.9220	.2739-02	.1951-02	.3950	2.573	544.8

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
225	337.50	.88000	929.00	.5690-01	.6880-01	.7780-01	.9220	.3967-02	.2900-02	.6280	4.144	530.7
225	337.50	.89000	930.00	.3170-01	.3910-01	.4480-01	.9220	.2285-02	.1618-02	.3230	2.123	547.8
225	337.50	.90000	931.00	.2040-01	.2510-01	.2880-01	.9220	.1466-02	.1040-02	.2080	1.404	547.0
214	337.50	.92600	933.00	.1350-01	.1650-01	.1880-01	.9220	.9567-03	.6899-03	.1450	1.058	539.7
214	343.12	.41500	934.00	.8840-01	.1081	.1236	.9220	.6304-02	.4506-02	.9230	5.996	544.4
214	343.12	.42000	935.00	.8570-01	.1055	.1212	.9220	.6177-02	.4371-02	.8740	5.711	549.4
214	343.12	.42500	936.00	.1023	.1275	.1480	.9220	.7544-02	.5216-02	.9880	6.441	559.9
214	343.12	.44500	939.00	.9360-01	.1167	.1355	.9220	.6909-02	.4771-02	.9010	5.942	560.5
214	343.12	.45000	940.00	.9480-01	.1185	.1377	.9220	.7023-02	.4835-02	.9070	5.978	561.7
214	343.12	.50000	941.00	.7520-01	.9470-01	.1108	.9220	.5549-02	.3835-02	.6980	4.687	567.3
214	343.12	.60000	942.00	.8410-01	.1038	.1194	.9220	.6087-02	.4288-02	.8480	5.457	551.5
214	343.12	.80000	944.00	.4760-01	.5810-01	.6630-01	.9220	.3382-02	.2426-02	.5020	3.280	542.5
227	345.56	.42500	2168.0	.9790-01	.1215	.1404	.9220	.7158-02	.4989-02	.9600	6.163	554.7
227	345.56	.92600	2160.0	.8600-02	.1050-01	.1190-01	.9220	.6091-03	.4371-03	.9000-01	.6390	540.7
214	348.00	.35000	945.00	.4250-01	.5130-01	.5800-01	.9220	.2956-02	.2165-02	.4730	3.023	530.8
214	348.00	.36000	946.00	.4210-01	.5080-01	.5750-01	.9220	.2932-02	.2145-02	.4670	2.992	531.6
214	348.00	.37000	947.00	.4260-01	.5140-01	.5820-01	.9220	.2968-02	.2170-02	.4720	3.030	531.9
225	348.00	.37500	948.00	.4570-01	.5580-01	.6360-01	.9220	.3241-02	.2329-02	.4820	3.083	540.3
225	348.00	.38000	949.00	.5070-01	.6200-01	.7080-01	.9220	.3610-02	.2583-02	.5300	3.413	542.3
225	348.00	.38500	950.00	.5940-01	.7300-01	.8360-01	.9220	.4262-02	.3028-02	.6100	3.933	546.0
225	348.00	.39000	951.00	.7260-01	.8950-01	.1029	.9220	.5242-02	.3698-02	.7320	4.742	549.4
225	348.00	.39500	952.00	.7600-01	.9380-01	.1080	.9220	.5506-02	.3871-02	.7600	4.848	551.0
225	348.00	.40000	953.00	.7460-01	.9200-01	.1058	.9220	.5393-02	.3801-02	.7500	4.872	549.9
225	348.00	.41000	955.00	.7420-01	.9200-01	.1062	.9220	.5413-02	.3781-02	.7310	4.753	554.0
225	348.00	.41500	956.00	.6640-01	.8240-01	.9530-01	.9220	.4854-02	.3384-02	.6510	4.244	554.9
225	348.00	.42000	957.00	.9220-01	.1154	.1343	.9220	.6846-02	.4696-02	.8720	5.680	561.7
225	348.00	.42500	958.00	.9100-01	.1132	.1311	.9220	.6682-02	.4635-02	.8820	5.759	557.0
225	348.00	.43000	959.00	.1028	.1294	.1513	.9220	.7710-02	.5237-02	.9520	6.170	565.6
225	348.00	.44000	960.00	.1074	.1354	.1585	.9220	.8080-02	.5474-02	.9890	6.428	566.6
225	348.00	.44500	961.00	.1038	.1313	.1541	.9220	.7853-02	.5290-02	.9450	6.131	568.7
225	348.00	.85000	968.00	.4740-01	.5810-01	.6660-01	.9220	.3393-02	.2414-02	.4870	3.164	545.4
225	348.00	.86000	969.00	.4850-01	.5960-01	.6840-01	.9220	.3484-02	.2472-02	.4960	3.229	546.6
226	348.00	.89000	972.00	.3620-01	.4450-01	.5090-01	.9220	.2597-02	.1848-02	.3740	2.483	545.0
227	354.00	.42500	2169.0	.1263	.1592	.1864	.9220	.9503-02	.6437-02	1.163	7.424	566.4
227	354.00	.43000	2174.0	.1319	.1665	.1953	.9220	.9958-02	.6724-02	1.206	7.698	567.6
227	354.00	.43500	2177.0	.1291	.1623	.1897	.9220	.9671-02	.6581-02	1.200	7.672	564.6
227	354.00	.44000	2179.0	.1327	.1672	.1956	.9220	.9973-02	.6768-02	1.227	7.837	565.7
227	355.16	.92600	2158.0	.8800-02	.1070-01	.1230-01	.9220	.6258-03	.4480-03	.9200-01	.6610	541.9

EXTERNAL TANK

PARAMETRIC DATA

ALPHA = 5.000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
219	4.950	-9.000	4.020	72.20	750.0	177.3	.4630	5.241	2623.	.2193-03	.1427-06	4.029
220	4.950	-9.000	4.020	72.10	749.0	177.0	.4630	5.232	2620.	.2193-03	.1425-06	4.033
221	4.950	-9.000	4.020	72.30	748.0	176.7	.4640	5.244	2619.	.2201-03	.1423-06	4.050
231	4.850	-9.000	4.020	72.60	744.0	175.9	.4650	5.265	2612.	.2220-03	.1416-06	4.096
232	4.980	-9.000	4.020	72.60	750.0	177.3	.4660	5.267	2623.	.2203-03	.1428-06	4.047
233	4.970	-9.000	4.020	72.60	754.0	178.2	.4660	5.268	2629.	.2193-03	.1434-06	4.019

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
219	.5099-01	.1145-01
220	.5094-01	.1145-01
221	.5099-01	.1143-01
231	.5105-01	.1137-01
232	.5112-01	.1143-01
233	.5116-01	.1146-01

TEST DATA

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
220	.00000	.25000-01	2187.0	.3639	.4794	.4675	.9540	.2381-01	.1854-01	2.881	19.88	593.5
220	.00000	.30000-01	2188.0	.3478	.4563	.4456	.9538	.2270-01	.1772-01	2.791	19.40	591.4
219	.00000	.40000-01	600.00	.3786	.4786	.4777	.9504	.2436-01	.1931-01	3.466	22.02	570.7
219	.00000	.50000-01	601.00	.2797	.3555	.3612	.9471	.1842-01	.1426-01	2.507	15.95	574.4
219	.00000	.70000-01	603.00	.2130	.2673	.2798	.9412	.1427-01	.1086-01	2.006	13.56	565.6
219	.00000	.80000-01	604.00	.2162	.2699	.2861	.9386	.1459-01	.1103-01	2.079	13.43	561.7
219	.00000	.15000	606.00	.7500-01	.9120-01	.1020	.9256	.5201-02	.3825-02	.8060	5.885	539.4
219	.00000	.20000	607.00	.3690-01	.4460-01	.5060-01	.9221	.2580-02	.1880-02	.4040	2.653	535.1
219	.00000	.21000	608.00	.3230-01	.3930-01	.4480-01	.9220	.2286-02	.1645-02	.3430	2.377	541.7
219	.00000	.22000	609.00	.2620-01	.3190-01	.3630-01	.9220	.1850-02	.1336-02	.2820	2.102	539.6
219	.00000	.30000	610.00	.2100-01	.2550-01	.2890-01	.9220	.1476-02	.1071-02	.2280	1.569	537.2
219	.00000	.35000	611.00	.2570-01	.3110-01	.3530-01	.9220	.1799-02	.1308-02	.2810	1.879	535.8

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN, EXTERNAL TANK HI/HREF

(RVZT37)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
219	.00000	.36000	612.00	.2550-01	.3100-01	.3520-01	.9220	.1796-02	.1302-02	.2770	1.869	537.6
219	.00000	.37500	614.00	.2940-01	.3570-01	.4060-01	.9220	.2073-02	.1500-02	.3180	2.143	538.5
221	.00000	.38500	616.00	.3430-01	.4170-01	.4750-01	.9220	.2422-02	.1748-02	.3670	2.477	538.0
221	.00000	.39500	618.00	.3850-01	.4720-01	.5400-01	.9220	.2752-02	.1965-02	.4010	2.706	544.0
221	.00000	.40000	619.00	.5530-01	.6830-01	.7850-01	.9220	.4005-02	.2822-02	.5570	3.729	550.4
221	.00000	.40500	620.00	.6470-01	.7980-01	.9180-01	.9220	.4679-02	.3297-02	.6510	4.367	550.5
221	.00000	.41500	622.00	.1263	.1594	.1869	.9220	.9528-02	.6437-02	1.158	7.675	568.1
221	.00000	.43000	625.00	.1706	.2162	.2542	.9220	.1296-01	.8701-02	1.545	10.26	570.4
221	.00000	.44000	626.00	.1524	.1916	.2237	.9220	.1141-01	.7773-02	1.424	9.483	564.7
221	.00000	.44500	627.00	.1447	.1817	.2120	.9220	.1081-01	.7380-02	1.358	9.129	564.0
221	.00000	.45000	628.00	.1339	.1672	.1943	.9220	.9907-02	.6826-02	1.281	8.628	560.3
221	.00000	.45500	629.00	.1213	.1514	.1758	.9220	.8965-02	.6183-02	1.163	7.955	559.9
219	.00000	.46000	630.00	.1148	.1454	.1709	.9220	.8715-02	.5854-02	1.044	6.926	572.0
219	.00000	.47000	631.00	.1111	.1402	.1644	.9220	.8386-02	.5663-02	1.021	6.782	570.0
219	.00000	.48000	632.00	.1008	.1273	.1491	.9220	.7604-02	.5143-02	.9300	6.215	569.5
219	.00000	.49000	633.00	.8910-01	.1118	.1305	.9220	.6653-02	.4544-02	.8390	5.670	565.7
219	.00000	.50000	634.00	.7920-01	.9930-01	.1157	.9220	.5901-02	.4039-02	.7490	5.193	564.8
219	.00000	.55000	635.00	.6220-01	.7670-01	.8830-01	.9220	.4502-02	.3171-02	.6280	4.159	552.2
219	.00000	.60000	636.00	.8200-01	.1015	.1170	.9220	.5968-02	.4180-02	.8170	5.246	554.9
219	.00000	.65000	637.00	.7720-01	.9530-01	.1096	.9220	.5591-02	.3937-02	.7780	5.020	552.5
219	.00000	.70000	638.00	.5160-01	.6360-01	.7310-01	.9220	.3726-02	.2633-02	.5250	3.586	550.8
219	.00000	.75000	639.00	.3970-01	.4890-01	.5610-01	.9220	.2859-02	.2026-02	.4070	2.620	549.5
219	.00000	.80000	640.00	.4810-01	.5890-01	.6750-01	.9220	.3440-02	.2451-02	.4990	3.129	546.6
219	.00000	.85000	641.00	.5000-01	.6110-01	.6990-01	.9220	.3563-02	.2549-02	.5240	3.315	544.7
219	.00000	.87000	643.00	.5530-01	.6780-01	.7770-01	.9220	.3960-02	.2822-02	.5750	3.707	546.6
219	.00000	.88000	644.00	.5370-01	.6590-01	.7550-01	.9220	.3850-02	.2739-02	.5560	3.614	547.4
221	.00000	.89000	645.00	.5140-01	.6300-01	.7220-01	.9220	.3679-02	.2621-02	.5320	3.502	545.1
221	.00000	.95000	649.00	.1570-01	.1900-01	.2140-01	.9220	.1091-02	.8024-03	.1770	1.302	527.6
233	5.6250	.42500	2170.0	.1319	.1672	.1967	.9220	.1006-01	.6747-02	1.204	7.720	575.6
233	5.6250	.43500	2178.0	.1175	.1476	.1723	.9220	.8816-02	.6009-02	1.110	7.139	569.3
221	11.250	.35000	650.00	.3470-01	.4230-01	.4810-01	.9220	.2453-02	.1772-02	.3720	2.512	537.9
221	11.250	.37000	652.00	.4390-01	.5350-01	.6080-01	.9220	.3102-02	.2240-02	.4700	3.174	538.0
221	11.250	.37500	653.00	.4220-01	.5130-01	.5840-01	.9220	.2979-02	.2151-02	.4520	3.059	537.9
221	11.250	.38000	654.00	.3720-01	.4530-01	.5150-01	.9220	.2628-02	.1895-02	.3960	2.681	538.9
221	11.250	.40500	659.00	.6420-01	.7950-01	.9180-01	.9220	.4679-02	.3271-02	.6340	4.273	554.0
221	11.250	.41500	661.00	.8420-01	.1048	.1213	.9220	.6184-02	.4295-02	.8200	5.487	556.9
221	11.250	.42000	662.00	.9140-01	.1142	.1326	.9220	.6763-02	.4662-02	.8760	5.864	560.1
221	11.250	.42500	663.00	.9010-01	.1122	.1301	.9220	.6632-02	.4593-02	.8720	5.861	558.1
221	11.250	.43000	664.00	.8490-01	.1053	.1216	.9220	.6202-02	.4328-02	.8350	5.678	554.9
221	11.250	.44000	665.00	.7880-01	.9780-01	.1129	.9220	.5757-02	.4020-02	.7770	5.252	554.6
221	11.250	.45000	666.00	.7830-01	.9670-01	.1113	.9220	.5677-02	.3991-02	.7840	5.304	551.5
221	11.250	.45500	667.00	.7630-01	.9420-01	.1084	.9220	.5527-02	.3888-02	.7650	5.177	551.2
221	11.250	.46000	668.00	.6700-01	.8250-01	.9480-01	.9220	.4835-02	.3415-02	.6780	4.610	549.2

IH72. OTS CLEAN. EXTERNAL TANK HI/HREF (RVZT37)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
221	11.250	.47000	669.00	.7400-01	.9140-01	.1052	.9220	.5366-02	.3773-02	.7410	5.047	551.4
221	11.250	.48000	670.00	.7150-01	.8830-01	.1017	.9220	.5184-02	.3644-02	.7160	4.874	551.5
221	11.250	.49000	671.00	.6550-01	.8100-01	.9340-01	.9220	.4763-02	.3338-02	.6510	4.413	553.0
221	11.250	.50000	672.00	.6600-01	.8160-01	.9400-01	.9220	.4794-02	.3363-02	.6570	4.556	552.5
221	11.250	.70000	674.00	.2740-01	.3330-01	.3790-01	.9220	.1935-02	.1397-02	.2930	2.004	538.0
221	11.250	.85000	676.00	.3230-01	.3900-01	.4410-01	.9220	.2250-02	.1647-02	.3590	2.300	530.1
221	11.250	.87000	678.00	.3190-01	.3860-01	.4370-01	.9220	.2229-02	.1626-02	.3510	2.277	532.3
221	11.250	.88000	679.00	.3510-01	.4250-01	.4830-01	.9220	.2462-02	.1788-02	.3810	2.500	534.9
221	11.250	.90000	681.00	.2500-01	.3030-01	.3440-01	.9220	.1755-02	.1276-02	.2730	1.851	534.1
221	11.250	.91000	682.00	.1260-01	.1520-01	.1720-01	.9220	.8752-03	.6421-03	.1410	1.035	528.9
221	11.250	.92600	683.00	.1850-01	.2230-01	.2530-01	.9220	.1290-02	.9407-03	.2030	1.494	532.5
221	11.250	.95000	684.00	.8700-02	.1050-01	.1190-01	.9220	.6066-03	.4459-03	.9800-01	.7160	527.7
221	17.000	.33000	685.00	.2580-01	.3130-01	.3550-01	.9220	.1810-02	.1313-02	.2790	1.885	535.5
221	17.000	.35000	687.00	.4520-01	.5500-01	.6260-01	.9220	.3193-02	.2306-02	.4840	3.271	537.8
233	17.000	.35500	2102.0	.4640-01	.5650-01	.6430-01	.9220	.3288-02	.2375-02	.5030	3.300	542.2
221	17.000	.36000	688.00	.4570-01	.5560-01	.6320-01	.9220	.3223-02	.2331-02	.4910	3.316	537.2
221	17.000	.37000	689.00	.4040-01	.4920-01	.5600-01	.9220	.2853-02	.2059-02	.4320	2.913	538.3
221	17.000	.37500	690.00	.3900-01	.4750-01	.5410-01	.9220	.2756-02	.1987-02	.4160	2.813	538.8
233	17.000	.42500	2171.0	.7290-01	.8980-01	.1033	.9220	.5283-02	.3729-02	.7450	4.760	554.2
233	17.000	.43000	2176.0	.6990-01	.8600-01	.9870-01	.9220	.5051-02	.3576-02	.7200	4.671	552.7
219	17.000	.50000	691.00	.7000-01	.8550-01	.9760-01	.9220	.4977-02	.3570-02	.7390	4.974	543.3
219	17.000	.60000	692.00	.3490-01	.4230-01	.4790-01	.9220	.2443-02	.1781-02	.3850	2.497	534.2
219	17.000	.70000	693.00	.2050-01	.2480-01	.2810-01	.9220	.1431-02	.1045-02	.2270	1.548	533.3
219	17.000	.80000	694.00	.2440-01	.2940-01	.3320-01	.9220	.1692-02	.1244-02	.2750	1.742	529.4
219	17.000	.87000	695.00	.2760-01	.3330-01	.3760-01	.9220	.1919-02	.1406-02	.3080	1.980	531.1
233	20.980	.35500	2098.0	.3870-01	.4690-01	.5330-01	.9220	.2726-02	.1981-02	.4270	2.846	538.7
233	20.980	.36000	2099.0	.4040-01	.4910-01	.5590-01	.9220	.2859-02	.2069-02	.4410	2.908	541.2
233	20.980	.36500	2100.0	.3800-01	.4620-01	.5250-01	.9220	.2687-02	.1946-02	.4150	2.743	540.6
233	23.070	.35500	2094.0	.4000-01	.4860-01	.5520-01	.9220	.2825-02	.2045-02	.4350	2.874	541.1
233	23.070	.36000	2095.0	.3870-01	.4700-01	.5340-01	.9220	.2733-02	.1978-02	.4210	2.780	541.2
233	23.070	.36500	2096.0	.3920-01	.4640-01	.5280-01	.9220	.2700-02	.1953-02	.4150	2.738	541.6
232	23.070	.43500	2000.0	.7200-01	.8850-01	.1015	.9220	.5188-02	.3681-02	.7420	4.751	548.9
232	23.070	.56890	2001.0	.2680-01	.3230-01	.3660-01	.9220	.1871-02	.1368-02	.2980	2.052	532.9
232	23.070	.70270	2002.0	.1580-01	.1900-01	.2150-01	.9220	.1098-02	.8088-03	.1800	1.296	528.0
232	23.070	.83500	2003.0	.2950-01	.3540-01	.3980-01	.9220	.2035-02	.1507-02	.3400	2.182	525.1
232	23.070	.90000	2004.0	.3040-01	.3650-01	.4120-01	.9220	.2105-02	.1554-02	.3470	2.356	527.1
233	23.070	.92600	2154.0	.1030-01	.1240-01	.1400-01	.9220	.7181-03	.5280-03	.1170	.8430	531.8
219	29.800	.70000-01	700.00	.1942	.2418	.2588	.9366	.1320-01	.9903-02	1.887	12.68	559.7
219	29.800	.10000+00	701.00	.1251	.1529	.1678	.9301	.8556-02	.6380-02	1.315	8.396	544.1
219	29.800	.15000	702.00	.5660-01	.6830-01	.7680-01	.9236	.3914-02	.2884-02	.6280	4.527	532.4
219	29.800	.20000	703.00	.2460-01	.2960-01	.3340-01	.9220	.1703-02	.1253-02	.2780	1.867	528.7
219	29.800	.30000	704.00	.7200-02	.8700-02	.9800-02	.9220	.5006-03	.3660-03	.8000-01	.5690	532.6
219	29.800	.35000	705.00	.3730-01	.4540-01	.5160-01	.9220	.2632-02	.1902-02	.4010	2.757	539.3

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
233	29.800	.35500	2090.0	.4280-01	.5200-01	.5920-01	.9220	.3028-02	.2187-02	.4630	3.057	542.2
233	29.800	.36500	2092.0	.4260-01	.5190-01	.5910-01	.9220	.3022-02	.2180-02	.4600	3.026	543.0
221	29.800	.50000	707.00	.5590-01	.6820-01	.7780-01	.9220	.3967-02	.2849-02	.5890	4.047	541.0
221	29.800	.60000	708.00	.2700-01	.3250-01	.3670-01	.9220	.1870-02	.1379-02	.3070	1.976	525.5
221	29.800	.70000	709.00	.1060-01	.1270-01	.1440-01	.9220	.7321-03	.5388-03	.1190	.7670	526.9
221	29.800	.80000	710.00	.3070-01	.3690-01	.4160-01	.9220	.2123-02	.1567-02	.3500	2.203	524.9
233	31.430	.44000	2166.0	.5090-01	.6200-01	.7070-01	.9220	.3615-02	.2603-02	.5470	3.636	544.0
232	31.430	.47600	2005.0	.5340-01	.6500-01	.7390-01	.9220	.3779-02	.2732-02	.5770	3.847	539.2
232	31.430	.51100	2006.0	.5340-01	.6480-01	.7370-01	.9220	.3769-02	.2728-02	.5780	3.973	538.6
232	31.430	.54600	2007.0	.1500-01	.1800-01	.2020-01	.9220	.1033-02	.7654-03	.1730	1.227	524.5
232	31.430	.61600	2009.0	.2130-01	.2560-01	.2890-01	.9220	.1476-02	.1091-02	.2450	1.693	526.1
232	31.430	.65000	2010.0	.1950-01	.2340-01	.2630-01	.9220	.1345-02	.9966-03	.2250	1.582	524.7
232	31.430	.68600	2014.0	.1150-01	.1380-01	.1550-01	.9220	.7927-03	.5870-03	.1320	.9340	524.8
232	31.430	.72050	2015.0	.7400-02	.8900-02	.1000-01	.9220	.5090-03	.3781-03	.8600-01	.6460	522.7
232	31.430	.79040	2017.0	.2350-01	.2820-01	.3180-01	.9220	.1627-02	.1201-02	.2680	1.714	526.9
232	31.430	.89520	2020.0	.3080-01	.3700-01	.4170-01	.9220	.2133-02	.1573-02	.3500	2.301	527.8
233	31.430	.92600	2153.0	.1730-01	.2080-01	.2360-01	.9220	.1205-02	.8853-03	.1960	1.442	532.3
232	33.750	.25000	2079.0	.8900-02	.1070-01	.1200-01	.9220	.6154-03	.4527-03	.1000+00	.8310	529.0
232	33.750	.30000	2080.0	.1160-01	.1400-01	.1580-01	.9220	.8071-03	.5916-03	.1300	.8610	531.2
232	33.750	.37500	2081.0	.4160-01	.5060-01	.5750-01	.9220	.2941-02	.2129-02	.4510	3.009	538.5
232	33.750	.40000	2082.0	.6520-01	.8000-01	.9160-01	.9220	.4684-02	.3334-02	.6770	4.497	547.3
232	33.750	.45000	2084.0	.1130-01	.1360-01	.1540-01	.9220	.7848-03	.5767-03	.1270	.8530	529.8
232	33.750	.60000	2085.0	.2050-01	.2470-01	.2780-01	.9220	.1424-02	.1050-02	.2340	1.568	527.7
233	33.750	.92600	2152.0	.1730-01	.2090-01	.2360-01	.9220	.1205-02	.8851-03	.1960	1.440	532.7
232	36.320	.25000	2066.0	.8100-01	.9990-01	.1150	.9220	.5877-02	.4141-02	.8210	5.434	552.3
232	36.320	.30000	2067.0	.1360-01	.1650-01	.1870-01	.9220	.9540-03	.6975-03	.1520	1.007	532.7
232	36.320	.35000	2069.0	.3940-01	.4780-01	.5430-01	.9220	.2778-02	.2012-02	.4270	2.847	538.3
232	36.320	.37500	2070.0	.3440-01	.4180-01	.4750-01	.9220	.2426-02	.1759-02	.3750	2.500	537.5
232	36.320	.40000	2071.0	.6110-01	.7480-01	.8560-01	.9220	.4375-02	.3125-02	.6410	4.258	545.5
232	36.320	.42000	2072.0	.8060-01	.9930-01	.1141	.9220	.5835-02	.4119-02	.8200	5.431	551.5
232	36.320	.42500	2073.0	.8250-01	.1015	.1166	.9220	.5960-02	.4216-02	.8440	5.592	550.4
232	36.320	.43000	2074.0	.7620-01	.9360-01	.1074	.9220	.5492-02	.3894-02	.7830	5.194	549.3
232	36.320	.43500	2075.0	.7610-01	.9350-01	.1072	.9220	.5481-02	.3889-02	.7840	5.198	549.0
232	36.320	.45000	2076.0	.5990-01	.7260-01	.8230-01	.9220	.4208-02	.3065-02	.6600	4.410	535.1
232	36.320	.60000	2077.0	.2190-01	.2640-01	.2980-01	.9220	.1521-02	.1121-02	.2490	1.686	528.1
232	36.320	.65000	2078.0	.1640-01	.1960-01	.2210-01	.9220	.1129-02	.8364-03	.1890	1.306	524.8
221	37.700	.50000-01	715.00	.2613	.3325	.3494	.9412	.1782-01	.1332-01	2.324	14.96	573.5
221	37.700	.70000-01	716.00	.2048	.2555	.2748	.9358	.1401-01	.1044-01	1.966	13.33	559.6
221	37.700	.10000+00	717.00	.1306	.1592	.1749	.9295	.8918-02	.6660-02	1.386	9.023	539.8
221	37.700	.15000	718.00	.5590-01	.6740-01	.7570-01	.9233	.3859-02	.2851-02	.6260	4.626	528.3
221	37.700	.20000	719.00	.2380-01	.2850-01	.3210-01	.9220	.1639-02	.1213-02	.2720	1.858	523.3
221	37.700	.30000	720.00	.1240-01	.1510-01	.1710-01	.9220	.8719-03	.6345-03	.1360	.9790	533.6
219	37.700	.35000	721.00	.3800-01	.4610-01	.5250-01	.9220	.2676-02	.1936-02	.4100	2.851	538.6

IH72, OTS CLEAN, EXTERNAL TANK HI/HREF (RVZT37)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
219	37.700	.50000	723.00	.5930-01	.7200-01	.8180-01	.9220	.4169-02	.3022-02	.6430	4.462	537.6
219	37.700	.60000	724.00	.2330-01	.2810-01	.3170-01	.9220	.1616-02	.1187-02	.2610	1.684	530.1
219	37.700	.70000	725.00	.1270-01	.1530-01	.1730-01	.9220	.8818-03	.6477-03	.1430	.9160	529.8
219	37.700	.80000	726.00	.1760-01	.2120-01	.2390-01	.9220	.1220-02	.8986-03	.2000	1.267	528.1
219	37.700	.87000	727.00	.2100-01	.2530-01	.2850-01	.9220	.1454-02	.1070-02	.2370	1.529	528.7
219	37.700	.92600	728.00	.1720-01	.2070-01	.2330-01	.9220	.1189-02	.8750-03	.1940	1.424	528.5
220	39.000	.10000-01	993.00	.4440	.5997	.6065	.9484	.3090-01	.2262-01	3.263	23.05	604.7
220	39.000	.25000-01	994.00	.2840	.3627	.3679	.9475	.1874-01	.1446-01	2.495	16.72	576.5
232	45.000	.25000	2036.0	.5900-02	.7100-02	.8000-02	.9220	.4088-03	.3018-03	.6700-01	.5520	526.8
232	45.000	.32500	2038.0	.3250-01	.3960-01	.4500-01	.9220	.2302-02	.1663-02	.3510	2.410	539.6
232	45.000	.35000	2039.0	.3300-01	.4000-01	.4540-01	.9220	.2322-02	.1687-02	.3610	2.447	538.5
232	45.000	.37500	2040.0	.1930-01	.2340-01	.2650-01	.9220	.1353-02	.9868-03	.2140	1.450	534.0
232	45.000	.40000	2041.0	.4460-01	.5450-01	.6220-01	.9220	.3178-02	.2278-02	.4710	3.180	543.7
232	45.000	.43000	2044.0	.9870-01	.1224	.1415	.9220	.7233-02	.5045-02	.9760	6.548	557.0
232	45.000	.44000	2046.0	.9720-01	.1205	.1391	.9220	.7114-02	.4969-02	.9650	6.474	556.3
232	45.000	.45000	2047.0	.9220-01	.1142	.1319	.9220	.6743-02	.4714-02	.9170	6.190	556.0
232	45.000	.47000	2048.0	.8040-01	.9940-01	.1145	.9220	.5856-02	.4111-02	.8080	5.508	554.0
232	45.000	.55000	2049.0	.3410-01	.4120-01	.4660-01	.9220	.2383-02	.1741-02	.3780	2.617	533.1
232	45.000	.60000	2050.0	.2810-01	.3390-01	.3840-01	.9220	.1961-02	.1438-02	.3160	2.145	531.0
232	45.000	.65000	2051.0	.2470-01	.2970-01	.3360-01	.9220	.1716-02	.1262-02	.2790	1.877	529.2
232	45.000	.75000	2052.0	.1130-01	.1360-01	.1530-01	.9220	.7816-03	.5786-03	.1300	.8380	525.1
232	45.000	.80000	2053.0	.1530-01	.1840-01	.2070-01	.9220	.1058-02	.7840-03	.1770	1.126	524.5
232	45.000	.83000	2054.0	.1380-01	.1660-01	.1870-01	.9220	.9538-03	.7067-03	.1600	1.012	524.5
232	45.000	.84000	2055.0	.1410-01	.1690-01	.1900-01	.9220	.9704-03	.7190-03	.1630	1.030	524.5
232	45.000	.85000	2056.0	.1470-01	.1760-01	.1980-01	.9220	.1011-02	.7494-03	.1700	1.090	524.2
232	45.000	.86000	2057.0	.1450-01	.1740-01	.1960-01	.9220	.1002-02	.7430-03	.1680	1.106	524.2
232	45.000	.87000	2058.0	.1550-01	.1860-01	.2090-01	.9220	.1071-02	.7924-03	.1790	1.203	525.1
232	45.000	.88000	2059.0	.1410-01	.1700-01	.1910-01	.9220	.9786-03	.7218-03	.1610	1.083	527.4
232	45.000	.89000	2060.0	.1380-01	.1650-01	.1860-01	.9220	.9533-03	.7030-03	.1570	1.057	527.6
232	45.000	.90000	2061.0	.8200-02	.9800-02	.1110-01	.9220	.5667-03	.4199-03	.9500-01	.6430	524.5
232	45.000	.91000	2062.0	.6000-02	.7200-02	.8100-02	.9220	.4164-03	.3069-03	.6800-01	.5640	527.9
232	45.000	.92600	2063.0	.7400-02	.8900-02	.1000-01	.9220	.5128-03	.3786-03	.8500-01	.6040	526.9
232	45.000	.93500	2064.0	.1210-01	.1460-01	.1650-01	.9220	.8425-03	.6190-03	.1370	1.029	529.8
232	45.000	.94500	2065.0	.9900-02	.1190-01	.1340-01	.9220	.6873-03	.5070-03	.1130	.7590	527.4
219	180.00	.15000-01	2182.0	.4453	.6944	.5597	.9715	.2854-01	.2271-01	2.375	17.00	645.7
219	180.00	.20000-01	2183.0	.4344	.6118	.5241	.9705	.2673-01	.2215-01	2.866	20.98	620.9
219	180.00	.25000-01	2184.0	.2821	.3472	.3172	.9705	.1618-01	.1439-01	2.879	20.96	550.2
219	180.00	.40000-01	737.00	.3314	.4127	.3817	.9666	.1946-01	.1690-01	3.220	20.87	559.7
219	180.00	.45000-01	738.00	.3653	.4765	.4372	.9648	.2230-01	.1863-01	2.993	19.40	589.6
219	180.00	.60000-01	739.00	.3297	.4253	.4031	.9595	.2056-01	.1681-01	2.808	18.53	583.3
219	180.00	.70000-01	740.00	.3383	.4359	.4209	.9562	.2147-01	.1725-01	2.890	19.19	582.7
219	180.00	.80000-01	741.00	.2793	.3570	.3512	.9530	.1791-01	.1424-01	2.454	17.57	578.0
219	180.00	.10000+00	742.00	.2478	.3124	.3174	.9470	.1619-01	.1264-01	2.294	15.15	568.8

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
219	180.00	.12500	743.00	.1939	.2431	.2556	.9404	.1303-01	.9890-02	1.834	13.22	564.8
219	180.00	.15000	744.00	.1564	.1944	.2100	.9347	.1071-01	.7978-02	1.533	10.60	558.1
219	180.00	.17500	745.00	.1067	.1311	.1442	.9300	.7354-02	.5439-02	1.097	8.234	548.7
219	180.00	.20000	746.00	.8060-01	.9860-01	.1102	.9264	.5617-02	.4111-02	.8470	6.067	544.2
219	180.00	.21500	747.00	.7090-01	.8790-01	.1000+00	.9247	.5100-02	.3617-02	.7020	4.846	556.0
219	180.00	.23000	748.00	.5980-01	.7410-01	.8480-01	.9234	.4326-02	.3051-02	.5940	4.375	555.4
219	180.00	.24000	749.00	.5290-01	.6570-01	.7570-01	.9228	.3860-02	.2696-02	.5180	3.883	558.2
219	180.00	.25000	750.00	.2750-01	.3380-01	.3870-01	.9228	.1973-02	.1402-02	.2810	2.269	549.9
219	180.00	.35000	752.00	.5700-01	.6970-01	.7930-01	.9228	.4042-02	.2906-02	.5990	3.793	544.1
219	180.00	.40000	753.00	.6370-01	.7750-01	.8780-01	.9228	.4479-02	.3247-02	.6840	4.411	539.7
219	180.00	.50000	754.00	.5150-01	.6230-01	.7030-01	.9228	.3586-02	.2626-02	.5690	3.745	533.8
219	180.00	.60000	755.00	.6300-01	.7670-01	.8710-01	.9228	.4441-02	.3211-02	.6710	4.317	541.2
219	180.00	.70000	756.00	.5420-01	.6550-01	.7400-01	.9228	.3771-02	.2763-02	.5990	3.981	533.5
219	180.00	.80000	757.00	.5070-01	.6150-01	.6970-01	.9228	.3553-02	.2585-02	.5500	3.461	537.6
219	180.00	.90000	758.00	.3480-01	.4260-01	.4850-01	.9228	.2471-02	.1773-02	.3630	2.352	545.2
219	235.00	.22000	759.00	.8840-01	.1116	.1263	.9279	.6441-02	.4510-02	.8140	5.987	569.8
219	235.00	.25000	760.00	.4380-01	.5460-01	.6220-01	.9253	.3173-02	.2231-02	.4210	3.275	561.5
219	235.00	.30000	762.00	.8380-01	.1048	.1195	.9253	.6096-02	.4274-02	.8010	4.780	562.8
219	235.00	.32000	763.00	.1021	.1279	.1461	.9253	.7452-02	.5207-02	.9690	5.681	564.3
219	235.00	.34000	764.00	.1205	.1507	.1719	.9253	.8767-02	.6143-02	1.150	6.768	563.0
219	235.00	.36000	765.00	.1575	.1997	.2301	.9253	.1174-01	.8033-02	1.426	8.465	572.7
219	235.00	.38000	766.00	.1515	.1930	.2232	.9253	.1138-01	.7725-02	1.347	8.072	575.8
221	247.00	.23000	768.00	.8750-01	.1106	.1263	.9265	.6439-02	.4462-02	.7980	5.875	569.0
221	247.00	.25000	769.00	.4430-01	.5560-01	.6350-01	.9253	.3238-02	.2259-02	.4170	3.217	563.3
221	247.00	.27000	770.00	.5490-01	.6980-01	.8070-01	.9253	.4114-02	.2799-02	.4890	3.519	573.2
221	247.00	.30000	772.00	.1054	.1341	.1550	.9253	.7904-02	.5373-02	.9370	5.650	573.5
221	247.00	.31000	773.00	.1220	.1549	.1787	.9253	.9111-02	.6219-02	1.094	6.549	572.0
221	247.00	.32000	774.00	.1531	.1962	.2277	.9253	.1161-01	.7809-02	1.331	7.883	577.4
221	247.00	.32500	775.00	.1693	.2184	.2549	.9253	.1299-01	.8634-02	1.436	8.511	581.5
221	247.00	.33000	776.00	.1901	.2479	.2917	.9253	.1487-01	.9692-02	1.554	9.206	587.6
221	247.00	.33500	777.00	.2062	.2720	.3228	.9253	.1646-01	.1051-01	1.625	9.597	593.4
221	247.00	.34000	778.00	.2098	.2770	.3290	.9253	.1678-01	.1070-01	1.649	9.736	593.8
221	247.00	.34500	779.00	.2201	.2922	.3484	.9253	.1777-01	.1122-01	1.701	10.06	596.3
221	247.00	.35000	780.00	.2004	.2633	.3116	.9253	.1589-01	.1022-01	1.600	9.512	591.4
221	247.00	.35500	781.00	.5000-03	.6000-03	.7000-03	.9253	.3668-04	.2709-04	.6000-02	.3600-01	534.2
219	247.00	.36000	782.00	.1801	.2335	.2734	.9253	.1394-01	.9183-02	1.507	9.003	586.2
219	247.00	.36500	783.00	.1605	.2052	.2379	.9253	.1213-01	.8184-02	1.409	8.430	578.1
219	247.00	.37000	784.00	.1436	.1816	.2089	.9253	.1065-01	.7321-02	1.311	7.912	571.2
219	247.00	.38000	786.00	.1266	.1586	.1812	.9253	.9241-02	.6458-02	1.201	7.358	564.3
219	247.00	.39000	787.00	.1218	.1519	.1729	.9253	.8818-02	.6213-02	1.178	7.251	560.6
219	247.00	.40000	788.00	.1159	.1451	.1657	.9253	.8452-02	.5912-02	1.102	6.828	563.9
220	247.00	.50000	789.00	.8760-01	.1062	.1187	.9253	.6046-02	.4461-02	.9520	6.137	535.6
220	247.00	.60000	790.00	.7140-01	.8830-01	.1000+00	.9253	.5093-02	.3638-02	.7120	4.657	553.2

IH72, OTS CLEAN, EXTERNAL TANK HI/HREF (RVZT37)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
220	247.00	.70000	791.00	.6990-01	.8670-01	.9820-01	.9253	.5003-02	.3563-02	.6920	4.868	554.7
220	247.00	.90000	793.00	.3250-01	.4080-01	.4680-01	.9253	.2383-02	.1654-02	.3030	1.933	566.0
233	247.00	.92600	2144.0	.2820-01	.3550-01	.4060-01	.9253	.2078-02	.1443-02	.2660	1.838	569.8
233	247.00	.93000	2149.0	.3870-01	.4890-01	.5610-01	.9253	.2870-02	.1981-02	.3600	2.567	572.3
233	250.57	.92600	2143.0	.3040-01	.3810-01	.4370-01	.9253	.2234-02	.1553-02	.2870	1.984	569.3
233	250.57	.93000	2148.0	.4040-01	.5090-01	.5840-01	.9253	.2990-02	.2065-02	.3760	2.623	571.9
233	250.57	.93700	2087.0	.4330-01	.5350-01	.6050-01	.9253	.3096-02	.2214-02	.4380	3.105	556.4
220	258.00	.27000	794.00	.5450-01	.6830-01	.7800-01	.9251	.3975-02	.2777-02	.5170	3.656	562.8
220	258.00	.29000	795.00	.9940-01	.1252	.1437	.9251	.7321-02	.5065-02	.9220	5.624	566.9
231	258.00	.32000	798.00	.2625	.3562	.4333	.9251	.2212-01	.1340-01	1.894	11.11	602.9
231	258.00	.34000	802.00	.2771	.3813	.4691	.9251	.2395-01	.1415-01	1.927	11.30	608.1
231	258.00	.34500	803.00	.2430	.3279	.3969	.9251	.2026-01	.1240-01	1.783	10.52	600.6
231	258.00	.35500	805.00	.1764	.2271	.2650	.9251	.1353-01	.9007-02	1.502	8.969	577.5
231	258.00	.36000	806.00	.1531	.1941	.2239	.9251	.1143-01	.7819-02	1.379	8.295	567.9
231	258.00	.36500	807.00	.1407	.1770	.2031	.9251	.1037-01	.7185-02	1.305	7.888	562.8
231	258.00	.37000	808.00	.1365	.1714	.1963	.9251	.1002-01	.6968-02	1.274	7.732	561.4
231	258.00	.37500	809.00	.1431	.1802	.2068	.9251	.1056-01	.7307-02	1.323	8.017	563.3
231	258.00	.38000	810.00	.1416	.1791	.2063	.9251	.1053-01	.7230-02	1.285	7.821	566.5
220	258.00	.40000	812.00	.1060	.1315	.1494	.9251	.7612-02	.5399-02	1.042	6.389	556.0
233	258.00	.93500	2151.0	.4550-01	.5730-01	.6570-01	.9251	.3361-02	.2330-02	.4290	2.995	569.9
220	270.00	.40000-01	985.00	.3434	.4443	.3887	.9744	.1980-01	.1749-01	2.884	18.42	584.1
220	270.00	.50000-01	986.00	.3967	.5184	.4601	.9707	.2344-01	.2021-01	3.225	20.41	589.4
220	270.00	.60000-01	987.00	.3836	.4969	.4514	.9671	.2299-01	.1954-01	3.210	20.73	584.7
220	270.00	.70000-01	988.00	.3630	.4706	.4355	.9636	.2219-01	.1849-01	3.027	19.96	585.2
220	270.00	.80000-01	989.00	.3283	.4234	.3998	.9602	.2037-01	.1673-01	2.789	19.41	582.2
220	270.00	.10000+00	990.00	.2898	.3668	.3596	.9538	.1832-01	.1476-01	2.632	16.97	570.6
220	270.00	.15000	991.00	.1815	.2273	.2393	.9400	.1219-01	.9247-02	1.720	12.53	562.9
220	270.00	.20000	992.00	.1103	.1350	.1483	.9299	.7556-02	.5619-02	1.151	7.796	544.1
220	270.00	.23000	813.00	.8210-01	.1026	.1168	.9257	.5949-02	.4181-02	.7830	5.650	561.7
220	270.00	.24000	814.00	.6740-01	.8440-01	.9680-01	.9246	.4930-02	.3436-02	.6400	5.136	562.7
220	270.00	.25000	815.00	.4380-01	.5410-01	.6160-01	.9246	.3135-02	.2230-02	.4360	3.429	553.4
220	270.00	.27000	816.00	.4640-01	.5770-01	.6580-01	.9246	.3352-02	.2366-02	.4540	3.211	557.0
220	270.00	.29000	817.00	.2156	.2774	.3246	.9246	.1654-01	.1098-01	1.846	11.27	580.9
220	270.00	.30000	818.00	.2941	.3870	.4609	.9246	.2348-01	.1498-01	2.339	13.97	592.9
220	270.00	.31000	819.00	.2870	.3789	.4525	.9246	.2305-01	.1462-01	2.257	13.36	594.6
220	270.00	.32000	820.00	.2745	.3604	.4284	.9246	.2182-01	.1398-01	2.198	12.99	591.8
220	270.00	.32500	821.00	.2856	.3751	.4461	.9246	.2272-01	.1455-01	2.282	13.45	592.1
220	270.00	.33000	822.00	.3337	.4423	.5299	.9246	.2699-01	.1700-01	2.593	15.29	596.4
220	270.00	.33500	823.00	.3772	.5140	.6301	.9246	.3210-01	.1921-01	2.703	15.89	608.3
220	270.00	.34500	825.00	.2291	.2949	.3452	.9246	.1758-01	.1167-01	1.959	11.64	581.1
220	270.00	.36000	828.00	.1408	.1738	.1974	.9246	.1006-01	.7171-02	1.411	8.486	552.1
220	270.00	.37000	830.00	.2900-01	.3540-01	.3990-01	.9246	.2031-02	.1475-02	.3040	1.847	542.8
220	270.00	.37500	831.00	.1580	.1988	.2288	.9246	.1165-01	.8047-02	1.468	8.858	566.6

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
220	270.00	.38000	832.00	.1288	.1613	.1850	.9246	.9424-02	.6562-02	1.220	7.376	563.0
220	270.00	.39000	833.00	.9510-01	.1177	.1340	.9246	.6823-02	.4843-02	.9420	5.785	554.4
220	270.00	.40000	834.00	.7970-01	.9800-01	.1110	.9246	.5655-02	.4060-02	.8130	5.021	548.7
220	270.00	.50000	835.00	.4510-01	.5530-01	.6250-01	.9246	.3182-02	.2297-02	.4660	2.949	545.9
220	270.00	.60000	836.00	.5180-01	.6360-01	.7200-01	.9246	.3666-02	.2637-02	.5300	3.530	547.8
220	270.00	.70000	837.00	.8110-01	.1007	.1147	.9246	.5841-02	.4133-02	.7980	5.593	555.9
220	270.00	.80000	838.00	.8870-01	.1091	.1236	.9246	.6295-02	.4516-02	.9020	5.601	549.1
220	270.00	.90000	839.00	.4910-01	.6090-01	.6940-01	.9246	.3534-02	.2500-02	.4820	3.068	556.1
233	270.00	.92600	2141.0	.3680-01	.4600-01	.5270-01	.9246	.2698-02	.1880-02	.3530	2.392	566.4
233	270.00	.93000	2146.0	.4460-01	.5610-01	.6450-01	.9246	.3302-02	.2284-02	.4210	2.940	569.7
233	270.00	.93500	2150.0	.5150-01	.6450-01	.7410-01	.9246	.3791-02	.2634-02	.4910	3.428	567.8
233	289.43	.92600	2140.0	.3870-01	.4860-01	.5610-01	.9235	.2872-02	.1980-02	.3680	2.544	568.4
233	289.43	.93000	2145.0	.4280-01	.5390-01	.6240-01	.9235	.3195-02	.2188-02	.4000	2.821	571.0
220	292.50	.23000	840.00	.6450-01	.8010-01	.9150-01	.9241	.4662-02	.3284-02	.6310	5.064	556.7
220	292.50	.25000	841.00	.3340-01	.4100-01	.4660-01	.9233	.2376-02	.1702-02	.3450	2.671	546.6
220	292.50	.35000	845.00	.1557	.1963	.2280	.9233	.1161-01	.7932-02	1.437	8.713	567.8
220	292.50	.37000	846.00	.7630-01	.9340-01	.1060	.9233	.5400-02	.3887-02	.7960	4.914	544.1
220	292.50	.40000	847.00	.5540-01	.6710-01	.7550-01	.9233	.3848-02	.2823-02	.6080	3.816	533.5
220	292.50	.45000	848.00	.1960-01	.2360-01	.2640-01	.9233	.1347-02	.1001-02	.2240	1.420	525.5
220	292.50	.60000	851.00	.3010-01	.3670-01	.4160-01	.9233	.2117-02	.1535-02	.3200	2.155	540.1
220	292.50	.65000	852.00	.7340-01	.9050-01	.1034	.9233	.5267-02	.3738-02	.7390	5.019	551.2
220	292.50	.70000	853.00	.9510-01	.1183	.1361	.9233	.6934-02	.4842-02	.9210	6.428	558.7
220	292.50	.75000	854.00	.7420-01	.9130-01	.1042	.9233	.5305-02	.3778-02	.7540	4.881	549.5
220	292.50	.80000	855.00	.9420-01	.1161	.1325	.9233	.6750-02	.4797-02	.9520	6.181	550.5
233	292.50	.82000	2129.0	.9760-01	.1208	.1382	.9234	.7072-02	.4992-02	.9810	5.978	557.6
233	292.50	.83000	2130.0	.9900-01	.1228	.1408	.9234	.7205-02	.5065-02	.9860	6.052	559.5
233	292.50	.85000	2132.0	.9090-01	.1128	.1295	.9234	.6623-02	.4648-02	.9010	5.559	560.3
233	292.50	.86000	2133.0	.9080-01	.1128	.1296	.9234	.6632-02	.4644-02	.8950	5.492	561.3
233	292.50	.87000	2134.0	.8790-01	.1095	.1261	.9234	.6449-02	.4497-02	.8580	5.291	563.2
233	292.50	.88000	2135.0	.8640-01	.1080	.1245	.9234	.6371-02	.4420-02	.8340	5.135	565.4
233	292.50	.89000	2136.0	.8210-01	.1028	.1188	.9234	.6077-02	.4202-02	.7870	4.854	566.8
220	292.50	.90000	856.00	.5250-01	.6530-01	.7510-01	.9233	.3823-02	.2673-02	.5100	3.292	558.1
233	292.50	.92600	2138.0	.4340-01	.5450-01	.6320-01	.9234	.3234-02	.2219-02	.4090	2.827	569.9
233	292.50	.93000	2139.0	.5370-01	.6780-01	.7880-01	.9234	.4031-02	.2746-02	.4980	3.526	572.8
233	301.50	.82000	2116.0	.9610-01	.1196	.1380	.9229	.7058-02	.4915-02	.9420	5.725	562.5
233	301.50	.83000	2117.0	.9510-01	.1183	.1363	.9229	.6976-02	.4865-02	.9360	5.659	561.8
233	301.50	.83500	2118.0	.9190-01	.1143	.1318	.9229	.6743-02	.4702-02	.9040	5.422	561.9
233	301.50	.84000	2119.0	.9210-01	.1146	.1321	.9229	.6759-02	.4712-02	.9050	5.475	562.0
233	301.50	.85000	2120.0	.9070-01	.1129	.1302	.9229	.6663-02	.4641-02	.8900	5.396	562.3
233	301.50	.86000	2021.0	.9120-01	.1139	.1316	.9229	.6734-02	.4669-02	.8860	5.394	564.4
233	301.50	.87000	2122.0	.9050-01	.1131	.1308	.9229	.6694-02	.4628-02	.8720	5.297	565.5
233	301.50	.88000	2123.0	.8840-01	.1107	.1284	.9229	.6567-02	.4523-02	.8450	5.156	567.2
233	301.50	.89000	2124.0	.8640-01	.1084	.1258	.9229	.6436-02	.4421-02	.8220	5.052	568.2

IH72, OTS CLEAN, EXTERNAL TANK HI/HREF (RVZT37)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
233	301.50	.90000	2125.0	.6210-01	.7800-01	.9050-01	.9229	.4629-02	.3179-02	.5910	3.661	568.3
233	301.50	.92600	2127.0	.6080-01	.7690-01	.8980-01	.9229	.4592-02	.3110-02	.5610	3.466	573.8
233	301.50	.93500	2128.0	.7000-01	.8840-01	.1030	.9229	.5270-02	.3583-02	.6510	4.334	572.3
233	305.40	.83000	2114.0	.9410-01	.1174	.1357	.9227	.6943-02	.4815-02	.9160	5.536	563.8
233	305.40	.83500	2115.0	.9360-01	.1169	.1353	.9227	.6923-02	.4787-02	.9050	5.509	565.1
220	305.40	.84000	857.00	.9450-01	.1174	.1353	.9227	.6891-02	.4816-02	.9270	5.698	556.6
231	305.40	.85000	858.00	.9010-01	.1127	.1305	.9227	.6663-02	.4601-02	.8550	5.284	558.4
231	305.40	.86000	859.00	.8870-01	.1110	.1286	.9227	.6566-02	.4531-02	.8410	5.240	558.7
231	305.40	.87000	860.00	.9120-01	.1142	.1326	.9227	.6768-02	.4654-02	.8570	5.351	560.1
231	305.40	.88000	861.00	.9430-01	.1183	.1373	.9227	.7009-02	.4817-02	.8860	5.530	560.4
231	305.40	.89000	862.00	.9270-01	.1162	.1348	.9227	.6883-02	.4733-02	.8720	5.473	560.1
231	305.40	.90000	863.00	.8320-01	.1040	.1205	.9227	.6154-02	.4248-02	.7900	4.989	558.5
231	305.40	.91000	864.00	.5070-01	.6270-01	.7200-01	.9227	.3674-02	.2587-02	.5030	3.654	549.8
231	305.40	.92600	865.00	.5830-01	.7310-01	.8490-01	.9227	.4335-02	.2975-02	.5460	3.927	560.9
231	309.30	.80000	866.00	.9770-01	.1226	.1425	.9225	.7274-02	.4988-02	.9150	5.712	560.8
231	309.30	.81000	867.00	.9440-01	.1185	.1378	.9225	.7036-02	.4818-02	.8820	5.470	561.3
231	309.30	.83000	869.00	.7370-01	.9160-01	.1058	.9225	.5404-02	.3762-02	.7140	4.457	554.5
231	315.00	.50000-01	871.00	.3516	.4567	.4320	.9596	.2206-01	.1795-01	2.904	18.23	582.6
231	315.00	.60000-01	872.00	.3169	.4089	.3947	.9562	.2015-01	.1618-01	2.677	17.49	578.9
220	315.00	.70000-01	873.00	.2956	.3753	.3699	.9527	.1884-01	.1506-01	2.655	17.83	572.6
220	315.00	.15000	876.00	.1343	.1656	.1804	.9324	.9190-02	.6840-02	1.355	9.894	550.9
220	315.00	.20000	877.00	.7660-01	.9320-01	.1045	.9250	.5321-02	.3902-02	.8220	5.563	538.4
220	315.00	.35000	878.00	.7170-01	.8740-01	.9950-01	.9223	.5066-02	.3653-02	.7620	4.752	540.3
220	315.00	.55000	881.00	.2970-01	.3620-01	.4120-01	.9223	.2097-02	.1512-02	.3160	2.112	540.1
220	315.00	.60000	882.00	.5330-01	.6560-01	.7510-01	.9223	.3827-02	.2717-02	.5450	3.663	548.2
220	315.00	.65000	883.00	.9510-01	.1191	.1385	.9223	.7053-02	.4843-02	.8990	6.087	563.2
220	315.00	.70000	884.00	.1150	.1456	.1709	.9223	.8706-02	.5857-02	1.042	7.316	571.1
220	315.00	.75000	885.00	.8670-01	.1086	.1263	.9223	.6433-02	.4414-02	.8190	5.117	563.5
220	315.00	.80000	886.00	.7660-01	.9520-01	.1100	.9223	.5604-02	.3901-02	.7470	4.671	557.4
220	315.00	.84000	887.00	.8630-01	.1072	.1238	.9223	.6304-02	.4395-02	.8450	5.284	556.7
231	315.00	.85000	888.00	.9010-01	.1128	.1313	.9223	.6701-02	.4598-02	.8470	5.333	560.1
231	315.00	.87000	890.00	.9540-01	.1197	.1394	.9223	.7117-02	.4869-02	.8920	5.627	561.2
231	315.00	.88000	891.00	.9960-01	.1252	.1460	.9223	.7456-02	.5087-02	.9260	5.876	562.2
231	315.00	.89000	892.00	.1000+00	.1255	.1461	.9223	.7458-02	.5107-02	.9370	6.054	560.8
231	315.00	.90000	893.00	.8530-01	.1068	.1241	.9223	.6334-02	.4353-02	.8050	5.265	559.4
231	315.00	.91000	894.00	.4720-01	.5820-01	.6680-01	.9223	.3413-02	.2410-02	.4750	3.462	547.4
231	315.00	.92600	895.00	.5660-01	.7090-01	.8230-01	.9223	.4204-02	.2889-02	.5340	3.860	559.4
231	322.30	.42000	897.00	.4010-01	.4880-01	.5550-01	.9221	.2832-02	.2045-02	.4270	2.759	535.7
231	322.30	.43500	898.00	.3820-01	.4640-01	.5280-01	.9221	.2694-02	.1948-02	.4080	2.565	534.9
231	322.30	.45000	899.00	.3540-01	.4310-01	.4900-01	.9221	.2500-02	.1808-02	.3790	2.494	534.8
231	322.30	.50000	900.00	.4420-01	.5390-01	.6140-01	.9221	.3136-02	.2257-02	.4670	3.123	537.5
231	322.30	.60000	901.00	.9920-01	.1247	.1456	.9221	.7432-02	.5064-02	.9210	6.070	562.4
231	322.30	.70000	902.00	.1076	.1353	.1580	.9221	.8066-02	.5494-02	.9990	6.764	562.5

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
233	324.45	.41000	2110.0	.4570-01	.5560-01	.6320-01	.9221	.3236-02	.2336-02	.4940	3.121	542.6
233	324.45	.92600	2164.0	.4730-01	.5920-01	.6890-01	.9221	.3524-02	.2420-02	.4540	3.195	566.5
233	326.85	.40500	2108.0	.4290-01	.5220-01	.5930-01	.9220	.3035-02	.2195-02	.4660	2.947	541.6
232	326.85	.44000	2021.0	.3350-01	.4060-01	.4610-01	.9220	.2358-02	.1711-02	.3650	2.330	537.2
232	326.85	.54600	2024.0	.4120-01	.5050-01	.5780-01	.9220	.2954-02	.2109-02	.4310	2.891	545.9
232	326.85	.58100	2025.0	.9810-01	.1239	.1453	.9220	.7429-02	.5014-02	.9030	6.242	570.4
232	326.85	.61600	2026.0	.9900-01	.1248	.1461	.9220	.7467-02	.5060-02	.9190	6.318	568.9
232	326.85	.65200	2027.0	.9580-01	.1201	.1400	.9220	.7157-02	.4896-02	.9070	6.248	565.2
232	326.85	.68600	2028.0	.8810-01	.1107	.1292	.9220	.6607-02	.4505-02	.8290	5.759	566.5
232	326.85	.72260	2029.0	.6260-01	.7790-01	.9030-01	.9220	.4617-02	.3200-02	.6100	4.229	559.8
232	326.85	.75790	2030.0	.4320-01	.5350-01	.6170-01	.9220	.3153-02	.2211-02	.4330	2.756	554.7
232	326.85	.79310	2031.0	.7390-01	.9230-01	.1073	.9220	.5487-02	.3778-02	.7100	4.415	562.6
232	326.85	.82830	2032.0	.8510-01	.1064	.1239	.9220	.6333-02	.4349-02	.8120	5.089	563.7
232	326.85	.86350	2033.0	.8520-01	.1066	.1240	.9220	.6340-02	.4355-02	.8140	5.059	563.5
232	326.85	.90000	2034.0	.9790-01	.1227	.1430	.9220	.7310-02	.5007-02	.9300	5.728	564.7
233	326.85	.92600	2163.0	.4610-01	.5770-01	.6710-01	.9220	.3432-02	.2360-02	.4440	3.129	565.7
232	326.85	.93390	2035.0	.6030-01	.7540-01	.8770-01	.9220	.4482-02	.3085-02	.5790	3.849	562.8
233	330.20	.40000	2104.0	.4160-01	.5060-01	.5750-01	.9220	.2940-02	.2130-02	.4540	2.873	540.7
233	330.20	.40500	2105.0	.4230-01	.5140-01	.5840-01	.9220	.2987-02	.2166-02	.4630	2.931	540.0
233	330.20	.41000	2106.0	.4080-01	.4960-01	.5640-01	.9220	.2884-02	.2088-02	.4450	2.806	540.9
231	330.20	.42000	905.00	.3890-01	.4730-01	.5380-01	.9220	.2746-02	.1986-02	.4160	2.702	534.6
231	330.20	.43500	906.00	.3620-01	.4400-01	.5010-01	.9220	.2557-02	.1848-02	.3870	2.523	535.0
231	330.20	.45000	907.00	.3930-01	.4790-01	.5460-01	.9220	.2787-02	.2006-02	.4150	2.723	537.2
231	330.20	.50000	908.00	.6060-01	.7450-01	.8530-01	.9220	.4357-02	.3096-02	.6210	4.449	543.7
231	330.20	.60000	909.00	.1112	.1403	.1644	.9220	.8396-02	.5679-02	1.019	6.606	564.9
231	330.20	.70000	910.00	.8810-01	.1103	.1285	.9220	.6559-02	.4499-02	.8310	5.570	559.5
231	330.20	.80000	911.00	.5870-01	.7300-01	.8450-01	.9220	.4312-02	.2998-02	.5710	3.648	553.8
231	330.20	.87000	912.00	.1530-01	.1860-01	.2120-01	.9220	.1081-02	.7793-03	.1620	1.042	536.3
233	330.20	.92600	2162.0	.4370-01	.5460-01	.6340-01	.9220	.3246-02	.2236-02	.4230	2.969	565.0
233	334.98	.92600	2161.0	.4770-01	.5960-01	.6930-01	.9220	.3543-02	.2440-02	.4610	3.227	565.1
231	334.98	.93500	913.00	.3910-01	.4740-01	.5380-01	.9220	.2748-02	.1998-02	.4250	3.115	531.6
231	337.50	.40000-01	915.00	.3248	.4193	.4042	.9564	.2064-01	.1658-01	2.738	17.08	579.2
231	337.50	.50000-01	916.00	.3180	.4085	.4017	.9530	.2051-01	.1624-01	2.727	17.33	576.4
231	337.50	.70000-01	918.00	.1394	.1688	.1711	.9467	.8738-02	.7118-02	1.524	10.69	530.2
231	337.50	.80000-01	919.00	.2249	.2828	.2921	.9438	.1491-01	.1148-01	2.087	14.13	562.6
231	337.50	.10000+00	920.00	.1814	.2250	.2381	.9386	.1216-01	.9263-02	1.780	11.86	552.1
231	337.50	.15000	921.00	.1026	.1260	.1395	.9286	.7124-02	.5238-02	1.051	7.631	543.6
231	337.50	.20000	922.00	.5620-01	.6820-01	.7710-01	.9231	.3935-02	.2867-02	.6050	4.056	533.4
231	337.50	.42000	923.00	.6180-01	.7600-01	.8720-01	.9220	.4454-02	.3157-02	.6290	4.111	544.9
233	337.50	.42500	2167.0	.5100-01	.6240-01	.7130-01	.9220	.3650-02	.2609-02	.5380	3.465	548.0
233	337.50	.43000	2172.0	.5000-03	.6000-03	.7000-03	.9220	.3657-04	.2679-04	.6000-02	.3800-01	534.2
231	337.50	.43500	924.00	.4750-01	.5810-01	.6630-01	.9220	.3387-02	.2428-02	.4970	3.267	539.4
231	337.50	.85000	926.00	.7080-01	.8800-01	.1018	.9220	.5195-02	.3617-02	.6910	4.457	553.2

DATE 23 JUN 81

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, OTS CLEAN, EXTERNAL TANK HI/HREF

(RVZT37)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
231	337.50	.86000	927.00	.7230-01	.8970-01	.1038	.9220	.5297-02	.3691-02	.7070	4.570	552.8
231	337.50	.87000	928.00	.7020-01	.8710-01	.1006	.9220	.5136-02	.3585-02	.6890	4.471	552.1
231	337.50	.88000	929.00	.3890-01	.4680-01	.5270-01	.9220	.2692-02	.1987-02	.4400	2.917	522.7
231	337.50	.89000	930.00	.7520-01	.9350-01	.1083	.9220	.5528-02	.3838-02	.7290	4.780	554.4
231	337.50	.90000	931.00	.6490-01	.8050-01	.9300-01	.9220	.4746-02	.3313-02	.6370	4.284	552.0
231	337.50	.91000	932.00	.4240-01	.5200-01	.5950-01	.9220	.3039-02	.2164-02	.4360	3.196	542.8
220	337.50	.92600	933.00	.4810-01	.5940-01	.6840-01	.9220	.3485-02	.2449-02	.4820	3.503	552.3
220	343.12	.41500	934.00	.5960-01	.7240-01	.8220-01	.9220	.4190-02	.3035-02	.6430	4.191	537.1
220	343.12	.42000	935.00	.6930-01	.8460-01	.9660-01	.9220	.4919-02	.3532-02	.7320	4.799	541.8
220	343.12	.42500	936.00	.8860-01	.1092	.1255	.9220	.6392-02	.4514-02	.8970	5.879	550.1
220	343.12	.44500	939.00	.8970-01	.1107	.1274	.9220	.6491-02	.4567-02	.9000	5.961	551.9
220	343.12	.45000	940.00	.9510-01	.1179	.1362	.9220	.6939-02	.4845-02	.9380	6.200	555.4
220	343.12	.50000	941.00	.1539	.2013	.2434	.9220	.1240-01	.7838-02	1.245	8.264	590.1
220	343.12	.60000	942.00	.1011	.1260	.1461	.9220	.7445-02	.5151-02	.9770	6.259	559.3
220	343.12	.80000	944.00	.6990-01	.8660-01	.1001	.9220	.5097-02	.3560-02	.6890	4.479	555.3
233	345.56	.42500	2168.0	.8240-01	.1020	.1177	.9220	.6021-02	.4217-02	.8280	5.309	557.8
233	345.56	.92600	2160.0	.4810-01	.5960-01	.6880-01	.9220	.3519-02	.2459-02	.4810	3.374	558.7
220	348.00	.35000	945.00	.3450-01	.4160-01	.4700-01	.9220	.2392-02	.1758-02	.3870	2.478	528.6
220	348.00	.36000	946.00	.3160-01	.3800-01	.4280-01	.9220	.2182-02	.1608-02	.3570	2.293	526.9
220	348.00	.37000	947.00	.2740-01	.3290-01	.3700-01	.9220	.1887-02	.1395-02	.3120	2.013	525.0
231	348.00	.37500	948.00	.2710-01	.3270-01	.3710-01	.9220	.1893-02	.1381-02	.2970	1.910	529.3
231	348.00	.38000	949.00	.2670-01	.3230-01	.3660-01	.9220	.1868-02	.1361-02	.2910	1.889	530.3
231	348.00	.38500	950.00	.2680-01	.3250-01	.3680-01	.9220	.1881-02	.1369-02	.2920	1.898	531.0
231	348.00	.39000	951.00	.2800-01	.3400-01	.3860-01	.9220	.1968-02	.1431-02	.3040	1.987	531.8
231	348.00	.39500	952.00	.2950-01	.3580-01	.4070-01	.9220	.2078-02	.1508-02	.3190	2.053	532.8
231	348.00	.40000	953.00	.3490-01	.4240-01	.4830-01	.9220	.2465-02	.1783-02	.3740	2.449	534.4
231	348.00	.41000	955.00	.5870-01	.7200-01	.8250-01	.9220	.4213-02	.2995-02	.6020	3.932	543.4
231	348.00	.41500	956.00	.6050-01	.7450-01	.8560-01	.9220	.4369-02	.3089-02	.6120	4.005	546.2
231	348.00	.42000	957.00	.8160-01	.1010	.1165	.9220	.5946-02	.4168-02	.8090	5.300	550.2
231	348.00	.42500	958.00	.7230-01	.8930-01	.1028	.9220	.5246-02	.3691-02	.7230	4.742	548.4
231	348.00	.43000	959.00	.9390-01	.1174	.1366	.9220	.6975-02	.4794-02	.8900	5.788	558.7
231	348.00	.44000	960.00	.9970-01	.1256	.1471	.9220	.7512-02	.5088-02	.9150	5.954	564.4
231	348.00	.44500	961.00	.1056	.1340	.1577	.9220	.8050-02	.5390-02	.9470	6.148	568.6
231	348.00	.85000	968.00	.6400-01	.7890-01	.9080-01	.9220	.4636-02	.3268-02	.6430	4.166	547.7
231	348.00	.86000	969.00	.6440-01	.7950-01	.9160-01	.9220	.4676-02	.3288-02	.6430	4.179	548.7
232	348.00	.89000	972.00	.6690-01	.8290-01	.9580-01	.9220	.4899-02	.3420-02	.6630	4.384	556.5
232	348.00	.91000	974.00	.3520-01	.4320-01	.4950-01	.9220	.2531-02	.1799-02	.3640	2.655	548.1
233	354.00	.42500	2169.0	.1287	.1658	.1977	.9220	.1011-01	.6586-02	1.111	7.025	585.4
233	354.00	.43000	2174.0	.1350	.1756	.2112	.9220	.1081-01	.6907-02	1.126	7.100	591.1
233	354.00	.43500	2177.0	.1441	.1874	.2254	.9220	.1153-01	.7371-02	1.201	7.578	591.1
233	354.00	.44000	2179.0	.1529	.1999	.2413	.9220	.1235-01	.7824-02	1.257	7.917	593.5
233	355.16	.92600	2158.0	.3510-01	.4320-01	.4960-01	.9220	.2536-02	.1797-02	.3630	2.596	552.2

EXTERNAL TANK

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
129	-.6000-01	.0000	3.010	37.10	702.0	249.7	.9940	6.305	2331.	.3340-03	.1998-06	3.896
130	-.4000-01	.0000	3.010	36.90	703.0	250.0	.9900	6.278	2332.	.3322-03	.2000-06	3.873
131	-.4000-01	.0000	3.010	36.90	707.0	251.3	.9900	6.278	2338.	.3305-03	.2010-06	3.844
133	.0000	.0000	3.010	37.40	703.0	250.1	1.002	6.357	2333.	.3362-03	.2001-06	3.919
134	.1000-01	.0000	3.010	37.20	705.0	250.6	.9970	6.322	2335.	.3338-03	.2004-06	3.887
135	.1000-01	.0000	3.010	37.20	705.0	250.8	.9990	6.333	2336.	.3340-03	.2006-06	3.889

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
129	.5538-01	.9189-02
130	.5527-01	.9216-02
131	.5531-01	.9247-02
133	.5562-01	.9162-02
134	.5548-01	.9197-02
135	.5554-01	.9194-02

TEST DATA

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
134	.00000	.25000-01	2187.0	.5076	.7070	.6028	.9720	.3344-01	.2816-01	3.519	24.45	579.7
134	.00000	.30000-01	2188.0	.5169	.7292	.6183	.9718	.3430-01	.2868-01	3.471	24.22	583.6
133	.00000	.40000-01	600.00	.6138	.8046	.7232	.9681	.4023-01	.3414-01	5.061	32.41	555.1
133	.00000	.50000-01	601.00	.4720	.6280	.5728	.9646	.3186-01	.2625-01	3.719	23.80	561.8
133	.00000	.70000-01	603.00	.3539	.4580	.4371	.9581	.2431-01	.1968-01	3.046	20.77	548.7
133	.00000	.80000-01	604.00	.3501	.4497	.4367	.9552	.2429-01	.1947-01	3.092	20.14	544.6
133	.00000	.15000	606.00	.1747	.2166	.2270	.9405	.1262-01	.9719-02	1.769	13.03	521.4
133	.00000	.20000	607.00	.1108	.1362	.1458	.9355	.8112-02	.6163-02	1.163	7.714	514.7
133	.00000	.21000	608.00	.8740-01	.1096	.1186	.9351	.6598-02	.4863-02	.8450	5.888	529.7
133	.00000	.22000	609.00	.7440-01	.9320-01	.1010	.9347	.5617-02	.4138-02	.7220	5.418	529.0
133	.00000	.30000	610.00	.6460-01	.8110-01	.8810-01	.9345	.4899-02	.3594-02	.6220	4.291	530.4
133	.00000	.35000	611.00	.6270-01	.7790-01	.8430-01	.9345	.4687-02	.3488-02	.6280	4.232	523.4

IH72, EXTERNAL TANK W/PROTUBERANCES HU/HREF (RVZT38)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
133	.00000	.36000	612.00	.6430-01	.7990-01	.8650-01	.9345	.4809-02	.3577-02	.6430	4.373	523.6
133	.00000	.37500	614.00	.6950-01	.8660-01	.9370-01	.9345	.5212-02	.3863-02	.6870	4.671	525.4
135	.00000	.38000	615.00	.6630-01	.8190-01	.8840-01	.9345	.4907-02	.3681-02	.6810	4.638	520.3
135	.00000	.38500	616.00	.6450-01	.7960-01	.8580-01	.9345	.4767-02	.3582-02	.6660	4.536	519.4
135	.00000	.39500	618.00	.6680-01	.8230-01	.8860-01	.9345	.4923-02	.3709-02	.6940	4.750	518.0
135	.00000	.40000	619.00	.5870-01	.7230-01	.7790-01	.9345	.4324-02	.3258-02	.6110	4.153	517.8
135	.00000	.40500	620.00	.5970-01	.7310-01	.7860-01	.9345	.4364-02	.3316-02	.6380	4.361	512.9
135	.00000	.41000	621.00	.5790-01	.7100-01	.7640-01	.9345	.4241-02	.3216-02	.6150	4.199	514.2
135	.00000	.41500	622.00	.6580-01	.8090-01	.8710-01	.9345	.4836-02	.3654-02	.6910	4.701	516.2
135	.00000	.43000	625.00	.9910-01	.1230	.1329	.9345	.7382-02	.5504-02	1.000	6.798	523.7
135	.00000	.44000	626.00	.1016	.1263	.1366	.9345	.7584-02	.5645-02	1.020	6.931	524.6
135	.00000	.44500	627.00	.1100	.1373	.1487	.9345	.8259-02	.6110-02	1.084	7.426	527.8
135	.00000	.45000	628.00	.1144	.1429	.1548	.9345	.8599-02	.6355-02	1.125	7.701	528.3
133	.00000	.46000	630.00	.8450-01	.1066	.1161	.9345	.6456-02	.4700-02	.7960	5.386	534.0
133	.00000	.47000	631.00	.6370-01	.7910-01	.8560-01	.9345	.4760-02	.3540-02	.6370	4.330	523.6
133	.00000	.48000	632.00	.4890-01	.6040-01	.6520-01	.9345	.3625-02	.2720-02	.5020	3.445	518.7
133	.00000	.49000	633.00	.4270-01	.5280-01	.5690-01	.9345	.3166-02	.2376-02	.4380	3.033	518.9
133	.00000	.50000	634.00	.4650-01	.5800-01	.6280-01	.9345	.3493-02	.2588-02	.4610	3.257	525.5
133	.00000	.55000	635.00	.6600-01	.8250-01	.8950-01	.9345	.4977-02	.3671-02	.6450	4.324	527.8
133	.00000	.60000	636.00	.8940-01	.1129	.1228	.9345	.6831-02	.4975-02	.8430	5.475	533.9
133	.00000	.65000	637.00	.9830-01	.1246	.1359	.9345	.7561-02	.5465-02	.9080	5.903	537.2
133	.00000	.70000	638.00	.9160-01	.1163	.1269	.9345	.7057-02	.5095-02	.8440	5.803	537.8
133	.00000	.75000	639.00	.7460-01	.9380-01	.1019	.9345	.5665-02	.4151-02	.7160	4.651	531.0
133	.00000	.80000	640.00	.8370-01	.1052	.1144	.9345	.6361-02	.4654-02	.7990	5.045	531.7
133	.00000	.85000	641.00	.8810-01	.1104	.1198	.9345	.6663-02	.4903-02	.8550	5.454	529.0
133	.00000	.87000	643.00	.1049	.1315	.1427	.9345	.7939-02	.5834-02	1.013	6.592	529.7
133	.00000	.88000	644.00	.1119	.1404	.1524	.9345	.8479-02	.6226-02	1.080	7.083	530.0
135	.00000	.95000	649.00	.1128	.1403	.1518	.9345	.8432-02	.6265-02	1.126	8.306	525.5
131	5.6250	.42500	2170.0	.7550-01	.9550-01	.1041	.9345	.5757-02	.4175-02	.7030	4.596	538.2
131	5.6250	.43000	2175.0	.1042	.1324	.1446	.9345	.7997-02	.5762-02	.9540	6.226	541.1
131	5.6250	.44000	2180.0	.9460-01	.1211	.1326	.9345	.7332-02	.5235-02	.8470	5.515	544.9
135	11.250	.35000	650.00	.6960-01	.8600-01	.9290-01	.9345	.5158-02	.3863-02	.7110	4.841	521.2
135	11.250	.36000	651.00	.7100-01	.8810-01	.9530-01	.9345	.5292-02	.3942-02	.7140	4.870	524.1
135	11.250	.37000	652.00	.6260-01	.7740-01	.8350-01	.9345	.4635-02	.3478-02	.6440	4.385	520.2
135	11.250	.37500	653.00	.5790-01	.7150-01	.7700-01	.9345	.4278-02	.3217-02	.5990	4.098	519.0
135	11.250	.38000	654.00	.5310-01	.6530-01	.7030-01	.9345	.3907-02	.2947-02	.5540	3.793	517.2
135	11.250	.39500	657.00	.4900-01	.6040-01	.6510-01	.9345	.3617-02	.2723-02	.5090	3.484	518.3
135	11.250	.40500	659.00	.5150-01	.6360-01	.6860-01	.9345	.3810-02	.2860-02	.5290	3.628	520.2
135	11.250	.41500	661.00	.6600-01	.8190-01	.8850-01	.9345	.4915-02	.3663-02	.6650	4.520	523.8
135	11.250	.42000	662.00	.8570-01	.1078	.1172	.9345	.6508-02	.4759-02	.8180	5.553	533.4
135	11.250	.42500	663.00	.9960-01	.1266	.1382	.9345	.7678-02	.5529-02	.9130	6.194	540.2
135	11.250	.43000	664.00	.1063	.1371	.1506	.9345	.8364-02	.5905-02	.9280	6.330	548.1
135	11.250	.44000	665.00	.1025	.1304	.1423	.9345	.7904-02	.5695-02	.9410	6.408	540.0

IH72, EXTERNAL TANK W/PROTUBERANCES HU/HREF

(RVZT38)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
135	11.250	.45000	666.00	.8400-01	.1052	.1141	.9345	.6335-02	.4665-02	.8180	5.593	530.0
135	11.250	.45500	667.00	.7660-01	.9570-01	.1038	.9345	.5764-02	.4252-02	.7490	5.122	529.2
135	11.250	.46000	668.00	.7500-01	.9380-01	.1017	.9345	.5646-02	.4163-02	.7320	5.027	529.4
135	11.250	.47000	669.00	.7410-01	.9260-01	.1003	.9345	.5571-02	.4117-02	.7280	5.018	528.3
135	11.250	.48000	670.00	.7420-01	.9240-01	.1000+00	.9345	.5556-02	.4121-02	.7370	5.083	526.4
135	11.250	.49000	671.00	.6980-01	.8680-01	.9390-01	.9345	.5214-02	.3876-02	.6980	4.800	525.2
135	11.250	.50000	672.00	.6700-01	.8340-01	.9030-01	.9345	.5015-02	.3719-02	.6650	4.670	526.5
135	11.250	.70000	674.00	.5880-01	.7340-01	.7960-01	.9345	.4418-02	.3263-02	.5760	3.958	528.6
135	11.250	.85000	676.00	.6590-01	.8110-01	.8740-01	.9345	.4853-02	.3657-02	.6860	4.423	517.8
135	11.250	.86000	677.00	.8090-01	.9970-01	.1074	.9345	.5967-02	.4495-02	.8420	5.461	518.0
135	11.250	.87000	678.00	.8750-01	.1079	.1163	.9345	.6457-02	.4862-02	.9090	5.950	518.3
135	11.250	.88000	679.00	.9170-01	.1132	.1221	.9345	.6784-02	.5093-02	.9440	6.246	519.9
135	11.250	.90000	681.00	.8530-01	.1053	.1136	.9345	.6308-02	.4738-02	.8800	6.012	519.7
135	11.250	.91000	682.00	.7590-01	.9340-01	.1006	.9345	.5587-02	.4216-02	.7930	5.876	517.1
135	11.250	.92600	683.00	.1028	.1317	.1443	.9345	.8013-02	.5707-02	.9160	6.711	544.8
135	11.250	.95000	684.00	.7610-01	.9410-01	.1015	.9345	.5639-02	.4227-02	.7800	5.711	520.7
135	17.000	.33000	685.00	.6240-01	.7700-01	.8300-01	.9345	.4608-02	.3467-02	.6470	4.411	518.7
135	17.000	.34000	686.00	.6680-01	.8250-01	.8890-01	.9345	.4938-02	.3711-02	.6900	4.705	519.3
135	17.000	.35000	687.00	.7420-01	.9230-01	.9990-01	.9345	.5547-02	.4120-02	.7400	5.025	525.7
131	17.000	.35500	2102.0	.7450-01	.9320-01	.1011	.9345	.5593-02	.4118-02	.7230	4.767	531.2
135	17.000	.36000	688.00	.7120-01	.8830-01	.9540-01	.9345	.5299-02	.3953-02	.7190	4.889	523.4
135	17.000	.37000	689.00	.5330-01	.6530-01	.7020-01	.9345	.3901-02	.2961-02	.5680	3.881	513.5
135	17.000	.37500	690.00	.4650-01	.5670-01	.6090-01	.9345	.3381-02	.2584-02	.5070	3.481	509.2
131	17.000	.42500	2171.0	.1130	.1469	.1620	.9345	.8959-02	.6248-02	.9560	6.107	553.7
131	17.000	.43000	2176.0	.1118	.1470	.1630	.9345	.9014-02	.6182-02	.9110	5.887	559.4
133	17.000	.50000	691.00	.1096	.1386	.1509	.9345	.8394-02	.6097-02	1.026	6.939	535.1
133	17.000	.60000	692.00	.4990-01	.6180-01	.6670-01	.9345	.3710-02	.2774-02	.5070	3.311	520.7
133	17.000	.70000	693.00	.6600-01	.8300-01	.9020-01	.9345	.5016-02	.3671-02	.6310	4.311	531.6
133	17.000	.80000	694.00	.7140-01	.8920-01	.9670-01	.9345	.5378-02	.3972-02	.7000	4.444	527.2
133	17.000	.92600	696.00	.1459	.1897	.2092	.9345	.1164-01	.8114-02	1.235	9.019	551.2
131	20.980	.36000	2099.0	.7340-01	.9070-01	.9780-01	.9345	.5409-02	.4060-02	.7540	5.025	521.1
131	20.980	.36500	2100.0	.6580-01	.8070-01	.8670-01	.9345	.4797-02	.3641-02	.7000	4.682	514.5
131	23.070	.35500	2094.0	.8140-01	.1025	.1114	.9345	.6164-02	.4503-02	.7740	5.125	534.8
131	23.070	.36000	2095.0	.7930-01	.9830-01	.1062	.9345	.5873-02	.4388-02	.8030	5.348	523.7
131	23.070	.36500	2096.0	.6920-01	.8490-01	.9130-01	.9345	.5048-02	.3829-02	.7340	4.907	515.1
130	23.070	.43500	2000.0	.1178	.1518	.1668	.9345	.9218-02	.6510-02	1.021	6.546	546.3
130	23.070	.56890	2001.0	.5860-01	.7380-01	.8030-01	.9345	.4438-02	.3239-02	.5520	3.806	532.6
130	23.070	.70270	2002.0	.7410-01	.9410-01	.1026	.9345	.5672-02	.4096-02	.6780	4.861	537.4
130	23.070	.83500	2003.0	.9780-01	.1235	.1345	.9345	.7436-02	.5405-02	.9110	5.828	534.5
130	23.070	.90000	2004.0	.8170-01	.1043	.1141	.9345	.6305-02	.4515-02	.7320	4.938	540.8
131	23.070	.92600	2154.0	.1151	.1513	.1676	.9345	.9272-02	.6365-02	.9390	6.657	559.1
133	29.800	.70000-01	700.00	.3699	.4796	.4575	.9581	.2545-01	.2057-01	3.165	21.37	549.6
133	29.800	.10000+00	701.00	.2761	.3452	.3452	.9500	.1920-01	.1536-01	2.700	17.38	527.6

IH72, EXTERNAL TANK W/PROTUBERANCES HU/HREF (RVZT38)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
133	29.800	.15000	702.00	.1753	.2171	.2275	.9405	.1265-01	.9749-02	1.779	12.90	520.9
133	29.800	.20000	703.00	.1015	.1240	.1325	.9355	.7368-02	.5648-02	1.097	7.446	509.2
133	29.800	.30000	704.00	.7920-01	.1003	.1094	.9345	.6085-02	.4403-02	.7340	5.226	536.7
133	29.800	.35000	705.00	.1033	.1315	.1437	.9345	.7994-02	.5744-02	.9400	6.458	539.7
131	29.800	.35500	2090.0	.1004	.1276	.1393	.9345	.7702-02	.5552-02	.9200	6.076	540.9
131	29.800	.36500	2092.0	.8630-01	.1086	.1181	.9345	.6533-02	.4773-02	.8200	5.413	534.9
131	29.800	.37000	2093.0	.6820-01	.8500-01	.9190-01	.9345	.5085-02	.3774-02	.6780	4.507	527.1
135	29.800	.50000	707.00	.8770-01	.1110	.1210	.9345	.6718-02	.4871-02	.8190	5.631	537.2
135	29.800	.60000	708.00	.7570-01	.9450-01	.1024	.9345	.5686-02	.4206-02	.7470	4.805	527.8
135	29.800	.70000	709.00	.7980-01	.1004	.1092	.9345	.6063-02	.4433-02	.7610	4.886	533.5
135	29.800	.80000	710.00	.9960-01	.1236	.1336	.9345	.7420-02	.5531-02	1.004	6.330	523.8
131	31.430	.44000	2166.0	.1142	.1469	.1612	.9345	.8916-02	.6318-02	1.003	6.660	547.9
130	31.430	.47600	2005.0	.1068	.1367	.1497	.9345	.8273-02	.5902-02	.9480	6.311	542.4
130	31.430	.51100	2006.0	.9030-01	.1151	.1258	.9345	.6955-02	.4989-02	.8130	5.584	540.1
130	31.430	.54600	2007.0	.4710-01	.5920-01	.6440-01	.9345	.3560-02	.2602-02	.4450	3.147	532.0
130	31.430	.61600	2009.0	.7780-01	.9860-01	.1075	.9345	.5942-02	.4299-02	.7160	4.925	536.6
130	31.430	.65000	2010.0	.9560-01	.1216	.1328	.9345	.7337-02	.5286-02	.8700	6.078	538.4
130	31.430	.68600	2014.0	.8340-01	.1065	.1165	.9345	.6439-02	.4611-02	.7480	5.234	540.8
130	31.430	.72050	2015.0	.5080-01	.6420-01	.7000-01	.9345	.3867-02	.2807-02	.4710	3.516	535.1
130	31.430	.79040	2017.0	.1154	.1468	.1604	.9345	.8864-02	.6377-02	1.047	6.644	538.9
130	31.430	.89520	2020.0	.1030	.1314	.1437	.9345	.7940-02	.5695-02	.9270	6.051	540.3
131	31.430	.92600	2153.0	.9370-01	.1219	.1344	.9345	.7436-02	.5183-02	.7920	5.754	553.9
130	33.750	.25000	2079.0	.6350-01	.8030-01	.8750-01	.9345	.4835-02	.3511-02	.5910	4.878	534.9
130	33.750	.30000	2080.0	.9240-01	.1171	.1277	.9345	.7061-02	.5107-02	.8500	5.623	536.6
130	33.750	.37500	2081.0	.7200-01	.9000-01	.9760-01	.9345	.5393-02	.3977-02	.6980	4.680	527.6
130	33.750	.40000	2082.0	.1026	.1334	.1470	.9345	.8127-02	.5669-02	.8630	5.721	550.8
130	33.750	.45000	2084.0	.1041	.1318	.1436	.9345	.7938-02	.5755-02	.9640	6.437	535.6
130	33.750	.60000	2085.0	.7220-01	.9120-01	.9940-01	.9345	.5491-02	.3992-02	.6730	4.501	534.4
131	33.750	.65000	2086.0	.1130	.1403	.1516	.9345	.8388-02	.6252-02	1.136	7.698	525.0
131	33.750	.92600	2152.0	.7690-01	.9940-01	.1094	.9345	.6049-02	.4251-02	.6620	4.820	550.9
130	36.320	.25000	2066.0	.8400-01	.1057	.1148	.9345	.6346-02	.4644-02	.7980	5.340	531.3
130	36.320	.30000	2067.0	.8990-01	.1146	.1253	.9345	.6927-02	.4970-02	.8100	5.353	540.0
130	36.320	.35000	2069.0	.9490-01	.1203	.1311	.9345	.7248-02	.5246-02	.8750	5.842	536.3
130	36.320	.37500	2070.0	.7770-01	.9750-01	.1059	.9345	.5852-02	.4297-02	.7450	4.990	529.7
130	36.320	.40000	2071.0	.9650-01	.1232	.1347	.9345	.7444-02	.5334-02	.8670	5.773	540.6
130	36.320	.42000	2072.0	.9390-01	.1197	.1309	.9345	.7235-02	.5190-02	.8460	5.636	540.1
130	36.320	.42500	2073.0	.1031	.1325	.1454	.9345	.8035-02	.5700-02	.9030	6.004	544.6
130	36.320	.43000	2074.0	.1038	.1323	.1446	.9345	.7992-02	.5739-02	.9380	6.249	539.7
130	36.320	.43500	2075.0	.1072	.1371	.1501	.9345	.8297-02	.5924-02	.9540	6.348	542.1
130	36.320	.60000	2077.0	.7190-01	.9040-01	.9820-01	.9345	.5425-02	.3976-02	.6850	4.630	530.7
130	36.320	.65000	2078.0	.7360-01	.9350-01	.1021	.9345	.5645-02	.4066-02	.6700	4.604	538.4
135	37.700	.50000-01	715.00	.4558	.5977	.5480	.9646	.3044-01	.2531-01	3.758	24.39	556.8
135	37.700	.70000-01	716.00	.3852	.5005	.4773	.9581	.2651-01	.2139-01	3.274	22.28	552.2

IH72, EXTERNAL TANK W/PROTUBERANCES HU/HREF

(RVZT38)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
135	37.700	.10000+00	717.00	.2531	.3117	.3117	.9500	.1731-01	.1406-01	2.638	17.36	517.7
135	37.700	.20000	719.00	.9300-01	.1127	.1201	.9355	.6670-02	.5163-02	1.039	7.160	504.0
135	37.700	.30000	720.00	.8210-01	.1038	.1130	.9345	.6278-02	.4561-02	.7710	5.542	536.3
133	37.700	.35000	721.00	.9320-01	.1177	.1281	.9345	.7123-02	.5184-02	.8780	6.121	534.1
133	37.700	.37500	722.00	.8450-01	.1062	.1154	.9345	.6421-02	.4702-02	.8090	5.652	531.3
133	37.700	.50000	723.00	.1042	.1303	.1412	.9345	.7855-02	.5796-02	1.019	7.107	527.6
133	37.700	.60000	724.00	.8930-01	.1112	.1204	.9345	.6695-02	.4965-02	.8850	5.723	525.1
133	37.700	.70000	725.00	.7900-01	.9940-01	.1081	.9345	.6013-02	.4395-02	.7530	4.819	532.2
133	37.700	.80000	726.00	.7860-01	.9780-01	.1059	.9345	.5888-02	.4370-02	.7810	4.965	524.6
133	37.700	.87000	727.00	.9450-01	.1184	.1286	.9345	.7150-02	.5254-02	.9130	5.886	529.7
133	37.700	.92600	728.00	.9050-01	.1139	.1237	.9345	.6882-02	.5035-02	.8640	6.329	531.8
134	39.000	.10000-01	993.00	.4474	.6142	.5241	.9731	.2908-01	.2482-01	3.220	23.08	574.9
134	39.000	.25000-01	994.00	.4330	.5781	.5038	.9720	.2795-01	.2402-01	3.371	22.73	564.3
130	45.000	.25000	2036.0	.4770-01	.5940-01	.6430-01	.9345	.3556-02	.2635-02	.4690	3.835	525.1
130	45.000	.32500	2038.0	.6230-01	.7790-01	.8440-01	.9345	.4665-02	.3441-02	.6040	4.175	527.5
130	45.000	.35000	2039.0	.6700-01	.8380-01	.9080-01	.9345	.5019-02	.3705-02	.6510	4.434	527.3
130	45.000	.37500	2040.0	.7350-01	.9220-01	.1001	.9345	.5531-02	.4061-02	.7040	4.785	529.8
130	45.000	.40000	2041.0	.7210-01	.9060-01	.9850-01	.9345	.5443-02	.3986-02	.6860	4.660	531.0
130	45.000	.42000	2042.0	.6970-01	.8750-01	.9500-01	.9345	.5252-02	.3852-02	.6650	4.523	530.3
130	45.000	.42500	2043.0	.7100-01	.8920-01	.9690-01	.9345	.5356-02	.3926-02	.6770	4.604	530.5
130	45.000	.43000	2044.0	.7360-01	.9250-01	.1006	.9345	.5558-02	.4067-02	.6980	4.743	531.4
130	45.000	.43500	2045.0	.7570-01	.9530-01	.1037	.9345	.5729-02	.4185-02	.7150	4.857	532.2
130	45.000	.44000	2046.0	.7610-01	.9590-01	.1043	.9345	.5766-02	.4208-02	.7170	4.871	532.6
130	45.000	.45000	2047.0	.7350-01	.9230-01	.1004	.9345	.5546-02	.4060-02	.6980	4.769	531.2
130	45.000	.47000	2048.0	.7390-01	.9300-01	.1012	.9345	.5592-02	.4085-02	.6980	4.815	532.1
130	45.000	.55000	2049.0	.5450-01	.6820-01	.7390-01	.9345	.4087-02	.3012-02	.5280	3.658	527.9
130	45.000	.60000	2050.0	.7310-01	.9160-01	.9940-01	.9345	.5494-02	.4041-02	.7040	4.786	528.9
130	45.000	.65000	2051.0	.8780-01	.1107	.1204	.9345	.6655-02	.4853-02	.8250	5.536	533.0
130	45.000	.75000	2052.0	.6960-01	.8730-01	.9470-01	.9345	.5237-02	.3849-02	.6690	4.291	529.3
130	45.000	.80000	2053.0	.7610-01	.9520-01	.1032	.9345	.5705-02	.4204-02	.7360	4.667	528.1
130	45.000	.83000	2054.0	.8950-01	.1126	.1223	.9345	.6761-02	.4945-02	.8480	5.355	531.6
130	45.000	.84000	2055.0	.1348	.1715	.1873	.9345	.1035-01	.7450-02	1.224	7.703	538.8
130	45.000	.85000	2056.0	.1080	.1371	.1496	.9345	.8267-02	.5971-02	.9900	6.323	537.3
130	45.000	.86000	2057.0	.6250-01	.7860-01	.8540-01	.9345	.4720-02	.3454-02	.5930	3.887	531.4
130	45.000	.87000	2058.0	.6610-01	.8350-01	.9090-01	.9345	.5025-02	.3653-02	.6160	4.128	534.4
130	45.000	.89000	2060.0	.7190-01	.9140-01	.9980-01	.9345	.5518-02	.3972-02	.6530	4.382	538.6
130	45.000	.90000	2061.0	.7030-01	.8890-01	.9690-01	.9345	.5353-02	.3887-02	.6540	4.407	534.9
130	45.000	.91000	2062.0	.5550-01	.7000-01	.7620-01	.9345	.4211-02	.3067-02	.5200	4.278	533.6
130	45.000	.92600	2063.0	.1093	.1414	.1556	.9345	.8603-02	.6040-02	.9340	6.590	548.5
130	45.000	.93500	2064.0	.1605	.2129	.2368	.9345	.1309-01	.8872-02	1.268	9.404	560.1
130	45.000	.94500	2065.0	.7500-01	.9630-01	.1056	.9345	.5834-02	.4147-02	.6600	4.392	543.8
133	180.00	.20000-01	2183.0	.5196	.7412	.6240	.9720	.3471-01	.2890-01	3.399	25.31	585.8
133	180.00	.25000-01	2184.0	.5007	.6834	.5887	.9720	.3275-01	.2785-01	3.664	26.40	571.8

IH72, EXTERNAL TANK W/PROTUBERANCES HU/HREF (RVZT38)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
133	180.00	.30000-01	2185.0	.4860	.6693	.5746	.9719	.3196-01	.2703-01	3.471	24.80	575.0
133	180.00	.40000-01	737.00	.4808	.6336	.5682	.9681	.3161-01	.2674-01	3.898	25.30	557.6
133	180.00	.45000-01	738.00	.4891	.6457	.5847	.9663	.3252-01	.2721-01	3.945	25.97	558.4
133	180.00	.60000-01	739.00	.4196	.5425	.5089	.9613	.2831-01	.2334-01	3.624	24.34	548.1
133	180.00	.70000-01	740.00	.3726	.4787	.4575	.9581	.2545-01	.2073-01	3.289	22.26	544.7
133	180.00	.80000-01	741.00	.3209	.4086	.3973	.9552	.2210-01	.1785-01	2.924	21.34	539.6
133	180.00	.10000+00	742.00	.2716	.3415	.3414	.9500	.1899-01	.1511-01	2.598	17.49	531.5
133	180.00	.12500	743.00	.2091	.2630	.2705	.9446	.1504-01	.1163-01	1.997	14.63	531.7
133	180.00	.15000	744.00	.1701	.2129	.2237	.9405	.1244-01	.9461-02	1.654	11.60	528.6
133	180.00	.17500	745.00	.1183	.1472	.1568	.9375	.8721-02	.6581-02	1.180	8.971	524.1
133	180.00	.20000	746.00	.8980-01	.1116	.1200	.9355	.6674-02	.4997-02	.9020	6.528	523.0
133	180.00	.21500	747.00	.7290-01	.9210-01	.1000+00	.9349	.5564-02	.4053-02	.6840	4.767	534.7
133	180.00	.23000	748.00	.6110-01	.7750-01	.8450-01	.9346	.4700-02	.3400-02	.5660	4.205	536.9
133	180.00	.24000	749.00	.5400-01	.6920-01	.7580-01	.9345	.4217-02	.3002-02	.4800	3.625	543.5
133	180.00	.25000	750.00	.2950-01	.3760-01	.4110-01	.9345	.2285-02	.1639-02	.2670	2.169	540.4
133	180.00	.30000	751.00	.5470-01	.7000-01	.7670-01	.9345	.4264-02	.3045-02	.4910	3.227	542.3
133	180.00	.35000	752.00	.6410-01	.8140-01	.8890-01	.9345	.4943-02	.3565-02	.5890	3.740	538.1
133	180.00	.40000	753.00	.6660-01	.8400-01	.9140-01	.9345	.5085-02	.3702-02	.6270	4.057	534.1
133	180.00	.50000	754.00	.6870-01	.8580-01	.9310-01	.9345	.5177-02	.3819-02	.6710	4.434	527.7
133	180.00	.60000	755.00	.6400-01	.8160-01	.8920-01	.9345	.4960-02	.3558-02	.5800	3.730	540.4
133	180.00	.70000	756.00	.6650-01	.8430-01	.9190-01	.9345	.5112-02	.3696-02	.6150	4.080	537.0
133	180.00	.80000	757.00	.6020-01	.7650-01	.8350-01	.9345	.4645-02	.3348-02	.5520	3.474	538.5
133	180.00	.90000	758.00	.3080-01	.3900-01	.4250-01	.9345	.2364-02	.1714-02	.2870	1.865	536.0
133	235.00	.22000	759.00	.7050-01	.8900-01	.9670-01	.9347	.5380-02	.3921-02	.6640	4.970	534.1
133	235.00	.25000	760.00	.3600-01	.4520-01	.4910-01	.9345	.2732-02	.2003-02	.3460	2.731	530.8
133	235.00	.27000	761.00	.2800-01	.3510-01	.3810-01	.9345	.2117-02	.1555-02	.2700	2.024	529.9
133	235.00	.30000	762.00	.6140-01	.7770-01	.8470-01	.9345	.4710-02	.3416-02	.5730	3.465	535.7
133	235.00	.32000	763.00	.6260-01	.7910-01	.8620-01	.9345	.4795-02	.3479-02	.5840	3.476	535.5
133	235.00	.34000	764.00	.6400-01	.8070-01	.8790-01	.9345	.4887-02	.3562-02	.6050	3.614	533.5
133	235.00	.36000	765.00	.6360-01	.8010-01	.8710-01	.9345	.4843-02	.3536-02	.6040	3.656	532.7
133	235.00	.38000	766.00	.6380-01	.8010-01	.8700-01	.9345	.4837-02	.3550-02	.6150	3.769	530.2
135	247.00	.23000	768.00	.6670-01	.8370-01	.9080-01	.9346	.5045-02	.3702-02	.6420	4.814	531.8
135	247.00	.25000	769.00	.3640-01	.4570-01	.4970-01	.9345	.2759-02	.2023-02	.3500	2.746	532.1
135	247.00	.27000	770.00	.3310-01	.4190-01	.4570-01	.9345	.2538-02	.1841-02	.3100	2.269	537.1
135	247.00	.30000	772.00	.5910-01	.7480-01	.8150-01	.9345	.4525-02	.3281-02	.5510	3.385	537.3
135	247.00	.31000	773.00	.6230-01	.7870-01	.8570-01	.9345	.4757-02	.3460-02	.5860	3.574	535.8
135	247.00	.32000	774.00	.6190-01	.7800-01	.8490-01	.9345	.4713-02	.3438-02	.5870	3.551	534.6
135	247.00	.32500	775.00	.6180-01	.7790-01	.8470-01	.9345	.4703-02	.3433-02	.5870	3.564	534.2
135	247.00	.33000	776.00	.6310-01	.7940-01	.8630-01	.9345	.4793-02	.3502-02	.6010	3.655	533.8
135	247.00	.33500	777.00	.6290-01	.7910-01	.8600-01	.9345	.4775-02	.3491-02	.6000	3.650	533.5
135	247.00	.34000	778.00	.6130-01	.7700-01	.8360-01	.9345	.4646-02	.3407-02	.5900	3.595	532.0
135	247.00	.34500	779.00	.6150-01	.7710-01	.8370-01	.9345	.4649-02	.3414-02	.5930	3.625	531.5
135	247.00	.35000	780.00	.6690-01	.8380-01	.9090-01	.9345	.5047-02	.3718-02	.6520	4.000	529.8

IH72. EXTERNAL TANK W/PROTUBERANCES HU/HREF

(RVZT38)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
135	247.00	.35500	781.00	.6460-01	.8090-01	.8770-01	.9345	.4872-02	.3589-02	.6290	3.868	530.0
133	247.00	.36000	782.00	.6720-01	.8450-01	.9190-01	.9345	.5111-02	.3739-02	.6420	3.940	531.8
133	247.00	.36500	783.00	.6450-01	.8100-01	.8800-01	.9345	.4894-02	.3585-02	.6180	3.786	531.1
133	247.00	.37000	784.00	.6060-01	.7590-01	.8240-01	.9345	.4584-02	.3368-02	.5850	3.606	529.7
133	247.00	.38000	786.00	.6180-01	.7730-01	.8380-01	.9345	.4659-02	.3438-02	.6050	3.772	527.6
133	247.00	.39000	787.00	.6350-01	.7920-01	.8570-01	.9345	.4768-02	.3533-02	.6280	3.935	525.6
134	247.00	.40000	788.00	.6270-01	.7830-01	.8480-01	.9345	.4718-02	.3488-02	.6160	3.889	526.8
134	247.00	.50000	789.00	.7880-01	.9550-01	.1022	.9345	.5668-02	.4374-02	.8840	5.799	502.5
134	247.00	.60000	790.00	.6390-01	.8050-01	.8760-01	.9345	.4861-02	.3547-02	.6050	3.998	533.9
134	247.00	.70000	791.00	.6180-01	.7760-01	.8420-01	.9345	.4672-02	.3430-02	.5950	4.240	531.0
134	247.00	.80000	792.00	.6290-01	.7860-01	.8520-01	.9345	.4725-02	.3490-02	.6160	3.908	528.1
134	247.00	.90000	793.00	.3960-01	.4860-01	.5230-01	.9345	.2902-02	.2195-02	.4160	2.725	515.2
131	247.00	.92600	2144.0	.3330-01	.4560-01	.5150-01	.9345	.2850-02	.1842-02	.2410	1.662	575.8
131	247.00	.93000	2149.0	.4820-01	.6720-01	.7660-01	.9345	.4237-02	.2664-02	.3320	2.359	582.0
131	250.57	.92600	2143.0	.3350-01	.4630-01	.5240-01	.9345	.2900-02	.1855-02	.2380	1.640	578.3
131	250.57	.93000	2148.0	.6080-01	.8480-01	.9660-01	.9345	.5344-02	.3361-02	.4190	2.910	581.9
131	250.57	.93700	2087.0	.3218	.4567	.5249	.9345	.2904-01	.1780-01	2.129	14.88	587.1
134	258.00	.27000	794.00	.3450-01	.4320-01	.4690-01	.9345	.2604-02	.1912-02	.3320	2.385	531.0
134	258.00	.29000	795.00	.4270-01	.5350-01	.5810-01	.9345	.3224-02	.2367-02	.4110	2.555	530.9
129	258.00	.32000	798.00	.6090-01	.7750-01	.8470-01	.9345	.4692-02	.3371-02	.5510	3.333	538.9
129	258.00	.34000	802.00	.7160-01	.9150-01	.1001	.9345	.5546-02	.3963-02	.6390	3.871	541.1
129	258.00	.34500	803.00	.7350-01	.9420-01	.1033	.9345	.5719-02	.4070-02	.6490	3.944	542.7
129	258.00	.35500	805.00	.6890-01	.8820-01	.9660-01	.9345	.5352-02	.3814-02	.6110	3.710	542.2
129	258.00	.36000	806.00	.6250-01	.7970-01	.8710-01	.9345	.4825-02	.3462-02	.5640	3.440	539.4
129	258.00	.36500	807.00	.5810-01	.7380-01	.8060-01	.9345	.4463-02	.3216-02	.5290	3.242	537.6
129	258.00	.37000	808.00	.5110-01	.6480-01	.7070-01	.9345	.3918-02	.2830-02	.4690	2.879	536.6
129	258.00	.37500	809.00	.5050-01	.6400-01	.6980-01	.9345	.3864-02	.2797-02	.4660	2.864	535.7
129	258.00	.38000	810.00	.4790-01	.6060-01	.6610-01	.9345	.3660-02	.2652-02	.4430	2.739	535.2
134	258.00	.40000	812.00	.5710-01	.7070-01	.7640-01	.9345	.4237-02	.3168-02	.5800	3.618	521.7
131	258.00	.93500	2151.0	.7110-01	.9550-01	.1069	.9345	.5912-02	.3935-02	.5450	3.806	568.3
134	270.00	.40000-01	985.00	.4192	.5522	.4954	.9681	.2748-01	.2326-01	3.402	22.00	558.3
134	270.00	.50000-01	986.00	.4276	.5635	.5157	.9646	.2861-01	.2373-01	3.467	22.29	558.5
134	270.00	.60000-01	987.00	.4292	.5574	.5223	.9613	.2898-01	.2381-01	3.647	23.95	551.5
134	270.00	.70000-01	988.00	.3694	.4795	.4573	.9581	.2537-01	.2050-01	3.145	21.09	551.1
134	270.00	.80000-01	989.00	.3239	.4172	.4050	.9552	.2247-01	.1797-01	2.832	20.06	547.0
134	270.00	.10000+00	990.00	.2609	.3297	.3297	.9500	.1829-01	.1447-01	2.442	16.02	535.9
134	270.00	.15000	991.00	.1551	.1938	.2034	.9405	.1129-01	.8605-02	1.520	11.27	528.0
134	270.00	.20000	992.00	.9570-01	.1180	.1266	.9355	.7021-02	.5310-02	.9900	6.791	518.2
134	270.00	.23000	813.00	.6810-01	.8600-01	.9360-01	.9346	.5194-02	.3778-02	.6390	4.674	535.4
134	270.00	.24000	814.00	.5610-01	.7100-01	.7740-01	.9345	.4294-02	.3115-02	.5240	4.259	536.5
134	270.00	.25000	815.00	.3050-01	.3820-01	.4150-01	.9345	.2301-02	.1691-02	.2940	2.341	530.5
134	270.00	.27000	816.00	.3390-01	.4240-01	.4600-01	.9345	.2553-02	.1883-02	.3310	2.377	528.7
134	270.00	.29000	817.00	.5000-01	.6250-01	.6780-01	.9345	.3760-02	.2776-02	.4890	3.071	528.3

IH72. AEDC V41A-R2A. INTEGRATED VEHICLE HEATING RATES

IH72. EXTERNAL TANK W/PROTUBERANCES HU/HREF

(RVZT38)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
134	270.00	.30000	818.00	.5920-01	.7410-01	.8040-01	.9345	.4461-02	.3282-02	.5730	3.534	530.0
134	270.00	.31000	819.00	.6240-01	.7820-01	.8490-01	.9345	.4708-02	.3461-02	.6030	3.688	530.3
134	270.00	.32000	820.00	.6580-01	.8240-01	.8930-01	.9345	.4956-02	.3651-02	.6400	3.904	529.3
134	270.00	.32500	821.00	.7310-01	.9140-01	.9910-01	.9345	.5499-02	.4057-02	.7140	4.346	528.6
134	270.00	.33000	822.00	.8960-01	.1124	.1221	.9345	.6773-02	.4969-02	.8610	5.245	531.3
134	270.00	.33500	823.00	.1166	.1486	.1624	.9345	.9008-02	.6467-02	1.058	6.434	541.0
134	270.00	.34500	825.00	.1342	.1757	.1944	.9345	.1078-01	.7443-02	1.109	6.672	555.7
134	270.00	.36000	828.00	.6520-01	.8110-01	.8760-01	.9345	.4862-02	.3620-02	.6540	3.987	524.0
134	270.00	.37000	830.00	.1390-01	.1740-01	.1900-01	.9345	.1052-02	.7700-03	.1330	.8100	532.3
134	270.00	.37500	831.00	.7850-01	.9850-01	.1069	.9345	.5931-02	.4354-02	.7560	4.643	531.0
134	270.00	.38000	832.00	.8600-01	.1080	.1173	.9345	.6509-02	.4773-02	.8260	5.075	531.5
134	270.00	.39000	833.00	.8750-01	.1096	.1190	.9345	.6600-02	.4853-02	.8470	5.262	530.2
134	270.00	.40000	834.00	.9420-01	.1177	.1276	.9345	.7081-02	.5227-02	.9210	5.748	528.3
134	270.00	.50000	835.00	.8610-01	.1079	.1171	.9345	.6497-02	.4776-02	.8320	5.304	530.4
134	270.00	.60000	836.00	.7900-01	.9960-01	.1084	.9345	.6016-02	.4381-02	.7440	4.985	534.8
134	270.00	.70000	837.00	.8090-01	.1012	.1098	.9345	.6091-02	.4486-02	.7860	5.582	529.4
134	270.00	.80000	838.00	.7740-01	.9630-01	.1043	.9345	.5784-02	.4292-02	.7680	4.822	525.7
134	270.00	.90000	839.00	.5570-01	.6830-01	.7350-01	.9345	.4076-02	.3093-02	.5920	3.849	513.2
131	270.00	.92600	2141.0	.6660-01	.8590-01	.9430-01	.9345	.5217-02	.3684-02	.5800	3.968	549.2
131	270.00	.93000	2146.0	.7110-01	.9200-01	.1012	.9345	.5595-02	.3933-02	.6130	4.321	550.8
131	270.00	.93500	2150.0	.6450-01	.8330-01	.9150-01	.9345	.5061-02	.3568-02	.5600	3.949	549.8
131	289.43	.92600	2140.0	.1138	.1515	.1689	.9345	.9342-02	.6296-02	.8940	6.196	564.7
131	289.43	.93000	2145.0	.1281	.1746	.1968	.9345	.1088-01	.7084-02	.9390	6.605	574.1
134	292.50	.23000	840.00	.6250-01	.7910-01	.8620-01	.9346	.4784-02	.3466-02	.5800	4.699	537.2
134	292.50	.25000	841.00	.3770-01	.4740-01	.5140-01	.9345	.2853-02	.2094-02	.3630	2.837	531.2
134	292.50	.27000	842.00	.2300-01	.2870-01	.3100-01	.9345	.1721-02	.1276-02	.2270	1.608	526.3
134	292.50	.35000	845.00	.7610-01	.9550-01	.1036	.9345	.5750-02	.4223-02	.7330	4.532	530.9
134	292.50	.37000	846.00	.7130-01	.8900-01	.9640-01	.9345	.5346-02	.3956-02	.7020	4.369	527.2
134	292.50	.40000	847.00	.6070-01	.7530-01	.8130-01	.9345	.4509-02	.3370-02	.6160	3.887	521.9
134	292.50	.45000	848.00	.6170-01	.7630-01	.8240-01	.9345	.4573-02	.3421-02	.6270	3.992	521.3
134	292.50	.50000	849.00	.6670-01	.8280-01	.8960-01	.9345	.4970-02	.3698-02	.6670	4.336	524.3
134	292.50	.60000	851.00	.6420-01	.8030-01	.8710-01	.9345	.4835-02	.3562-02	.6250	4.224	529.2
134	292.50	.65000	852.00	.6610-01	.8270-01	.8970-01	.9345	.4977-02	.3665-02	.6420	4.405	529.5
134	292.50	.70000	853.00	.6670-01	.8340-01	.9040-01	.9345	.5014-02	.3701-02	.6520	4.621	528.3
134	292.50	.75000	854.00	.4900-01	.6050-01	.6530-01	.9345	.3621-02	.2719-02	.5040	3.315	519.3
134	292.50	.80000	855.00	.5830-01	.7230-01	.7810-01	.9345	.4336-02	.3235-02	.5880	3.872	522.8
131	292.50	.82000	2129.0	.6450-01	.8060-01	.8730-01	.9345	.4828-02	.3567-02	.6320	3.909	529.5
131	292.50	.83000	2130.0	.6070-01	.7610-01	.8250-01	.9345	.4566-02	.3360-02	.5890	3.667	531.5
131	292.50	.85000	2132.0	.6530-01	.8200-01	.8910-01	.9345	.4928-02	.3610-02	.6250	3.908	533.6
131	292.50	.86000	2133.0	.6490-01	.8160-01	.8870-01	.9345	.4908-02	.3588-02	.6180	3.840	534.6
131	292.50	.87000	2134.0	.6550-01	.8260-01	.8980-01	.9345	.4967-02	.3626-02	.6210	3.884	535.3
131	292.50	.88000	2135.0	.6090-01	.7690-01	.8370-01	.9345	.4630-02	.3369-02	.5730	3.578	536.7
131	292.50	.89000	2136.0	.5700-01	.7210-01	.7850-01	.9345	.4344-02	.3155-02	.5330	3.339	537.6

IH72. EXTERNAL TANK W/PROTUBERANCES HU/HREF

(RVZT38)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
134	292.50	.90000	856.00	.4140-01	.5080-01	.5470-01	.9345	.3033-02	.2295-02	.4350	2.869	514.9
131	292.50	.92600	2138.0	.1051	.1391	.1545	.9345	.8547-02	.5814-02	.8420	5.845	561.9
131	292.50	.93000	2139.0	.1090	.1472	.1652	.9345	.9137-02	.6030-02	.8210	5.822	570.6
131	301.50	.82000	2116.0	.5940-01	.7410-01	.8030-01	.9345	.4441-02	.3285-02	.5840	3.611	528.9
131	301.50	.83000	2117.0	.6400-01	.7990-01	.8660-01	.9345	.4788-02	.3539-02	.6280	3.863	529.2
131	301.50	.83500	2118.0	.7040-01	.8800-01	.9540-01	.9345	.5277-02	.3891-02	.6860	4.181	530.4
131	301.50	.84000	2119.0	.7110-01	.8910-01	.9670-01	.9345	.5349-02	.3934-02	.6880	4.229	531.7
131	301.50	.85000	2120.0	.6630-01	.8330-01	.9040-01	.9345	.5000-02	.3670-02	.6380	3.930	532.7
131	301.50	.86000	2021.0	.5690-01	.7140-01	.7760-01	.9345	.4292-02	.3145-02	.5450	3.371	533.5
131	301.50	.87000	2122.0	.5690-01	.7150-01	.7760-01	.9345	.4294-02	.3149-02	.5470	3.373	533.1
131	301.50	.88000	2123.0	.5690-01	.7160-01	.7780-01	.9345	.4306-02	.3145-02	.5400	3.348	535.0
131	301.50	.89000	2124.0	.5500-01	.6930-01	.7550-01	.9345	.4173-02	.3041-02	.5190	3.243	536.0
131	301.50	.90000	2125.0	.4960-01	.6280-01	.6840-01	.9345	.3782-02	.2746-02	.4640	2.921	537.8
131	301.50	.92600	2127.0	.8620-01	.1128	.1247	.9345	.6899-02	.4771-02	.7160	4.464	556.7
131	301.50	.93500	2128.0	.7000-01	.9200-01	.1019	.9345	.5636-02	.3874-02	.5730	3.842	558.7
131	305.40	.82000	2113.0	.6150-01	.7660-01	.8300-01	.9345	.4589-02	.3402-02	.6090	3.747	527.7
131	305.40	.83000	2114.0	.7130-01	.8900-01	.9650-01	.9345	.5335-02	.3946-02	.7010	4.314	528.9
134	305.40	.83500	2115.0	.8500-01	.1069	.1161	.9345	.6424-02	.4700-02	.8110	5.014	534.2
129	305.40	.84000	857.00	.8600-01	.1071	.1159	.9345	.6433-02	.4772-02	.8530	5.330	525.8
129	305.40	.85000	858.00	.7690-01	.9730-01	.1059	.9345	.5868-02	.4261-02	.7160	4.477	534.2
129	305.40	.86000	859.00	.6140-01	.7760-01	.8450-01	.9345	.4679-02	.3403-02	.5740	3.621	533.6
129	305.40	.87000	860.00	.6650-01	.8400-01	.9150-01	.9345	.5067-02	.3683-02	.6200	3.925	533.8
129	305.40	.88000	861.00	.6550-01	.8260-01	.8990-01	.9345	.4979-02	.3629-02	.6160	3.898	532.6
129	305.40	.89000	862.00	.6430-01	.8110-01	.8830-01	.9345	.4889-02	.3559-02	.6020	3.829	533.2
129	305.40	.90000	863.00	.6570-01	.8330-01	.9080-01	.9345	.5029-02	.3637-02	.6040	3.863	536.0
129	305.40	.91000	864.00	.4740-01	.5980-01	.6520-01	.9345	.3609-02	.2623-02	.4410	3.230	534.0
129	305.40	.92600	865.00	.5000-01	.6500-01	.7160-01	.9345	.3967-02	.2771-02	.4230	3.059	549.7
129	309.30	.81000	867.00	.6330-01	.7950-01	.8630-01	.9345	.4781-02	.3506-02	.6050	3.814	529.7
129	309.30	.83000	869.00	.6020-01	.7580-01	.8240-01	.9345	.4566-02	.3333-02	.5680	3.584	531.9
129	315.00	.50000-01	871.00	.4306	.5785	.5256	.9646	.2911-01	.2385-01	3.277	20.76	564.8
129	315.00	.60000-01	872.00	.3799	.5073	.4715	.9613	.2611-01	.2104-01	2.942	19.38	562.4
134	315.00	.70000-01	873.00	.3683	.4820	.4590	.9581	.2546-01	.2043-01	3.052	20.67	555.2
134	315.00	.10000+00	875.00	.2594	.3311	.3311	.9500	.1837-01	.1439-01	2.341	15.40	541.9
134	315.00	.15000	876.00	.1516	.1912	.2012	.9405	.1116-01	.8412-02	1.431	10.54	534.4
134	315.00	.20000	877.00	.9270-01	.1153	.1240	.9355	.6880-02	.5145-02	.9270	6.318	524.5
134	315.00	.35000	878.00	.6980-01	.8740-01	.9480-01	.9345	.5262-02	.3871-02	.6760	4.236	530.0
134	315.00	.50000	880.00	.6300-01	.7850-01	.8510-01	.9345	.4719-02	.3494-02	.6210	4.310	526.8
134	315.00	.55000	881.00	.4550-01	.5630-01	.6070-01	.9345	.3369-02	.2522-02	.4630	3.126	521.0
134	315.00	.60000	882.00	.5880-01	.7330-01	.7940-01	.9345	.4406-02	.3261-02	.5790	3.929	527.1
134	315.00	.65000	883.00	.6610-01	.8260-01	.8950-01	.9345	.4964-02	.3670-02	.6490	4.476	527.6
134	315.00	.70000	884.00	.6140-01	.7650-01	.8280-01	.9345	.4593-02	.3404-02	.6070	4.361	526.2
134	315.00	.75000	885.00	.5180-01	.6400-01	.6900-01	.9345	.3826-02	.2876-02	.5350	3.418	518.7
134	315.00	.80000	886.00	.5800-01	.7160-01	.7730-01	.9345	.4288-02	.3217-02	.5940	3.787	519.8

IH72, EXTERNAL TANK W/PROTUBERANCES HU/HREF (RVZT38)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
134	315.00	.84000	887.00	.9830-01	.1223	.1324	.9345	.7344-02	.5452-02	.9770	6.205	525.4
129	315.00	.85000	888.00	.9410-01	.1198	.1309	.9345	.7248-02	.5214-02	.8540	5.439	538.3
129	315.00	.87000	890.00	.6370-01	.8050-01	.8760-01	.9345	.4853-02	.3530-02	.5950	3.809	533.6
129	315.00	.88000	891.00	.6520-01	.8240-01	.8970-01	.9345	.4971-02	.3611-02	.6070	3.906	534.1
129	315.00	.89000	892.00	.6840-01	.8650-01	.9430-01	.9345	.5221-02	.3788-02	.6350	4.155	534.7
129	315.00	.90000	893.00	.6500-01	.8250-01	.9000-01	.9345	.4987-02	.3598-02	.5950	3.933	537.0
129	315.00	.91000	894.00	.4310-01	.5450-01	.5930-01	.9345	.3287-02	.2389-02	.4020	2.954	533.8
129	315.00	.92600	895.00	.1102	.1435	.1583	.9345	.8767-02	.6105-02	.9250	6.709	350.8
129	322.30	.42000	897.00	.6570-01	.8280-01	.9010-01	.9345	.4991-02	.3641-02	.6190	4.009	532.2
129	322.30	.43500	898.00	.7480-01	.9430-01	.1026	.9345	.5680-02	.4144-02	.7050	4.439	532.1
129	322.30	.45000	899.00	.6440-01	.8120-01	.8840-01	.9345	.4895-02	.3566-02	.6050	3.984	532.7
129	322.30	.50000	900.00	.6310-01	.7980-01	.8700-01	.9345	.4817-02	.3493-02	.5840	3.915	535.0
129	322.30	.60000	901.00	.5590-01	.7030-01	.7640-01	.9345	.4231-02	.3095-02	.5300	3.550	530.9
129	322.30	.70000	902.00	.6740-01	.8490-01	.9230-01	.9345	.5114-02	.3733-02	.6360	4.374	531.8
131	324.45	.40500	2109.0	.7520-01	.9480-01	.1031	.9345	.5702-02	.4157-02	.7100	4.502	535.8
131	324.45	.41000	2110.0	.7210-01	.9090-01	.9890-01	.9345	.5469-02	.3990-02	.6830	4.330	535.5
131	324.45	.92600	2164.0	.8080-01	.1043	.1146	.9345	.6341-02	.4471-02	.7020	4.982	549.7
131	326.85	.40000	2107.0	.7340-01	.9220-01	.1001	.9345	.5536-02	.4060-02	.7050	4.474	533.1
131	326.85	.40500	2108.0	.7070-01	.8900-01	.9680-01	.9345	.5353-02	.3913-02	.6740	4.272	534.6
130	326.85	.44000	2021.0	.7070-01	.8920-01	.9710-01	.9345	.5365-02	.3908-02	.6630	4.241	533.5
130	326.85	.54600	2024.0	.2840-01	.3530-01	.3820-01	.9345	.2113-02	.1568-02	.2790	1.894	524.8
130	326.85	.58100	2025.0	.5010-01	.6310-01	.6860-01	.9345	.3790-02	.2770-02	.4740	3.342	531.9
130	326.85	.61600	2026.0	.5620-01	.7070-01	.7690-01	.9345	.4248-02	.3105-02	.5310	3.720	532.0
130	326.85	.65200	2027.0	.6260-01	.7900-01	.8600-01	.9345	.4752-02	.3461-02	.5870	4.108	533.5
130	326.85	.68600	2028.0	.6570-01	.8280-01	.9010-01	.9345	.4981-02	.3632-02	.6180	4.366	533.0
130	326.85	.72260	2029.0	.4840-01	.6060-01	.6570-01	.9345	.3632-02	.2676-02	.4690	3.299	528.0
130	326.85	.75790	2030.0	.5120-01	.6360-01	.6870-01	.9345	.3797-02	.2830-02	.5120	3.312	522.3
130	326.85	.79310	2031.0	.7700-01	.9660-01	.1049	.9345	.5795-02	.4257-02	.7390	4.669	529.6
130	326.85	.82830	2032.0	.8620-01	.1080	.1173	.9345	.6481-02	.4764-02	.8280	5.281	529.2
130	326.85	.86350	2033.0	.1010	.1272	.1383	.9345	.7644-02	.5582-02	.9530	6.014	532.4
130	326.85	.90000	2034.0	.9250-01	.1179	.1289	.9345	.7125-02	.5115-02	.8350	5.207	539.8
131	326.85	.92600	2163.0	.8100-01	.1049	.1155	.9345	.6387-02	.4481-02	.6950	4.928	551.6
13.	326.85	.93390	2035.0	.1024	.1359	.1513	.9345	.8360-02	.5661-02	.8070	5.374	560.4
131	330.20	.40000	2104.0	.7380-01	.9250-01	.1004	.9345	.5552-02	.4085-02	.7160	4.545	531.5
131	330.20	.40500	2105.0	.7550-01	.9470-01	.1027	.9345	.5682-02	.4177-02	.7300	4.636	531.9
131	330.20	.41000	2106.0	.6900-01	.8670-01	.9420-01	.9345	.5209-02	.3817-02	.6610	4.180	533.6
129	330.20	.42000	905.00	.6530-01	.8210-01	.8920-01	.9345	.4940-02	.3617-02	.6210	4.040	530.5
129	330.20	.43500	906.00	.6790-01	.8560-01	.9320-01	.9345	.5161-02	.3760-02	.6370	4.163	532.8
129	330.20	.45000	907.00	.6530-01	.8240-01	.8970-01	.9345	.4968-02	.3619-02	.6130	4.030	532.8
129	330.20	.50000	908.00	.5660-01	.7150-01	.7780-01	.9345	.4310-02	.3136-02	.5300	3.815	533.3
129	330.20	.60000	909.00	.5460-01	.6860-01	.7460-01	.9345	.4130-02	.3024-02	.5200	3.430	530.4
129	330.20	.70000	910.00	.6300-01	.7950-01	.8650-01	.9345	.4793-02	.3487-02	.5890	3.996	533.4
129	330.20	.80000	911.00	.4900-01	.6140-01	.6660-01	.9345	.3690-02	.2712-02	.4710	3.044	528.7

IH72, EXTERNAL TANK W/PROTUBERANCES HU/HREF (RVZT38)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
129	330.20	.87000	912.00	.1560-01	.1960-01	.2140-01	.9345	.1184-02	.8627-03	.1460	.9420	532.6
131	330.20	.92600	2162.0	.8730-01	.1134	.1250	.9345	.6915-02	.4829-02	.7410	5.233	553.2
131	334.98	.92600	2161.0	.1563	.2072	.2305	.9345	.1275-01	.8643-02	1.242	8.701	563.0
129	334.98	.93500	913.00	.1542	.2113	.2387	.9345	.1322-01	.8542-02	1.111	7.972	572.2
129	334.98	.94500	914.00	.6430-01	.8140-01	.8880-01	.9345	.4916-02	.3563-02	.5950	4.310	535.2
129	337.50	.40000-01	915.00	.4331	.5825	.5176	.9682	.2866-01	.2399-01	3.283	20.62	565.4
129	337.50	.50000-01	916.00	.4345	.5849	.5310	.9647	.2941-01	.2406-01	3.285	20.98	565.7
129	337.50	.70000-01	918.00	.3239	.4162	.3976	.9582	.2202-01	.1794-01	2.839	19.77	544.0
129	337.50	.80000-01	919.00	.3121	.4068	.3941	.9553	.2183-01	.1729-01	2.609	17.76	551.3
129	337.50	.10000+00	920.00	.2470	.3155	.3153	.9501	.1746-01	.1368-01	2.214	14.84	540.4
129	337.50	.15000	921.00	.1491	.1871	.1966	.9405	.1089-01	.8259-02	1.428	10.44	529.3
129	337.50	.20000	922.00	.9470-01	.1173	.1260	.9355	.6981-02	.5246-02	.9550	6.449	520.2
129	337.50	.42000	923.00	.7830-01	.9920-01	.1082	.9345	.5991-02	.4338-02	.7230	4.747	535.5
131	337.50	.42500	2167.0	.7500-01	.9430-01	.1026	.9345	.5672-02	.4147-02	.7140	4.632	534.6
129	337.50	.43500	924.00	.7230-01	.9120-01	.9930-01	.9345	.5499-02	.4006-02	.6790	4.472	532.8
129	337.50	.85000	926.00	.5730-01	.7180-01	.7790-01	.9345	.4315-02	.3174-02	.5520	3.605	528.3
129	337.50	.86000	927.00	.6350-01	.7980-01	.8670-01	.9345	.4802-02	.3518-02	.6050	3.957	530.3
129	337.50	.87000	928.00	.6920-01	.8700-01	.9460-01	.9345	.5237-02	.3832-02	.6570	4.308	530.8
129	337.50	.88000	929.00	.5090-01	.6290-01	.6790-01	.9345	.3760-02	.2820-02	.5190	3.442	518.4
129	337.50	.89000	930.00	.1078	.1377	.1507	.9345	.8348-02	.5969-02	.9640	6.362	540.8
129	337.50	.90000	931.00	.1072	.1373	.1504	.9345	.8329-02	.5936-02	.9500	6.421	542.2
129	337.50	.91000	932.00	.1061	.1360	.1491	.9345	.8255-02	.5874-02	.9370	6.868	542.8
134	337.50	.92600	933.00	.1987	.2573	.2831	.9345	.1571-01	.1102-01	1.706	12.43	549.8
134	343.12	.41500	934.00	.7430-01	.9250-01	.1001	.9345	.5554-02	.4123-02	.7390	4.844	525.4
134	343.12	.42000	935.00	.7950-01	.9960-01	.1081	.9345	.5998-02	.4410-02	.7680	5.069	530.4
134	343.12	.42500	936.00	.1063	.1352	.1477	.9345	.8192-02	.5900-02	.9730	6.408	539.7
134	343.12	.44500	939.00	.8970-01	.1135	.1237	.9345	.6865-02	.4977-02	.8350	5.575	536.8
134	343.12	.45000	940.00	.8240-01	.1038	.1129	.9345	.6264-02	.4572-02	.7810	5.220	533.8
134	343.12	.50000	941.00	.5880-01	.7340-01	.7950-01	.9345	.4413-02	.3263-02	.5780	3.959	527.5
134	343.12	.60000	942.00	.6950-01	.8690-01	.9420-01	.9345	.5229-02	.3854-02	.6760	4.399	529.1
134	343.12	.80000	944.00	.6490-01	.8080-01	.8750-01	.9345	.4854-02	.3599-02	.6430	4.238	526.0
131	345.56	.42500	2168.0	.1041	.1333	.1460	.9345	.8075-02	.5757-02	.9280	5.990	545.4
131	345.56	.92600	2160.0	.2618	.3568	.4021	.9345	.2224-01	.1448-01	1.922	13.39	574.0
134	348.00	.35000	945.00	.6690-01	.8320-01	.6990-01	.9345	.4990-02	.3711-02	.6680	4.281	524.6
134	348.00	.36000	946.00	.6780-01	.8430-01	.9120-01	.9345	.5061-02	.3763-02	.6770	4.355	524.6
134	348.00	.37000	947.00	.6540-01	.8120-01	.8780-01	.9345	.4871-02	.3630-02	.6580	4.242	523.4
129	348.00	.37500	948.00	.6450-01	.8090-01	.8770-01	.9345	.4860-02	.3573-02	.6210	3.996	528.5
129	348.00	.38000	949.00	.6470-01	.8110-01	.8800-01	.9345	.4873-02	.3581-02	.6210	4.033	528.7
129	348.00	.38500	950.00	.6390-01	.8020-01	.8700-01	.9345	.4820-02	.3541-02	.6140	3.996	528.8
129	348.00	.39000	951.00	.6640-01	.8330-01	.9040-01	.9345	.5006-02	.3679-02	.6390	4.180	528.7
129	348.00	.39500	952.00	.6780-01	.8510-01	.9240-01	.9345	.5115-02	.3754-02	.6490	4.187	529.3
129	348.00	.40000	953.00	.6590-01	.8270-01	.8980-01	.9345	.4971-02	.3651-02	.6320	4.150	529.0
129	348.00	.41000	955.00	.6770-01	.8510-01	.9250-01	.9345	.5124-02	.3751-02	.6440	4.237	530.5

IH72, EXTERNAL TANK W/PROTUBERANCES HU/HREF (RVZT38)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
129	348.00	.42500	958.00	.8990-01	.1151	.1261	.9345	.6982-02	.4982-02	.8000	5.262	541.7
129	348.00	.43000	959.00	.1150	.1495	.1648	.9345	.9130-02	.6366-02	.9670	6.319	550.3
129	348.00	.44000	960.00	.1075	.1385	.1521	.9345	.8426-02	.5951-02	.9320	6.119	545.7
129	348.00	.44500	961.00	.9360-01	.1190	.1299	.9345	.7196-02	.5185-02	.8530	5.625	537.7
129	348.00	.85000	968.00	.6910-01	.8680-01	.9430-01	.9345	.5223-02	.3829-02	.6600	4.315	530.0
129	348.00	.86000	969.00	.8030-01	.1012	.1101	.9345	.6100-02	.4447-02	.7550	4.949	532.4
130	348.00	.89000	972.00	.1323	.1703	.1870	.9345	.1033-01	.7311-02	1.151	7.645	545.7
130	348.00	.90000	973.00	.1443	.1868	.2055	.9345	.1136-01	.7978-02	1.234	8.389	548.4
130	348.00	.91000	974.00	.1589	.2061	.2271	.9345	.1255-01	.8785-02	1.349	9.823	549.6
131	352.20	.93700	2089.0	.4260-01	.5960-01	.6810-01	.9345	.3767-02	.2355-02	.2910	1.997	583.3
131	354.00	.42500	2169.0	.1820-01	.2280-01	.2480-01	.9345	.1369-02	.1006-02	.1760	1.141	532.1
131	354.00	.43000	2174.0	.1100	.1400	.1529	.9345	.8459-02	.6086-02	1.004	6.492	541.7
131	354.00	.43500	2177.0	.1075	.1368	.1494	.9345	.8263-02	.5948-02	.9830	6.353	541.5
131	354.00	.44000	2179.0	.1093	.1393	.1522	.9345	.8418-02	.6046-02	.9930	6.420	542.4
131	355.16	.92600	2158.0	.3001	.4307	.4979	.9345	.2754-01	.1660-01	1.935	13.59	590.1

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
136	.1000-01	.0000	4.020	72.60	747.0	176.5	.4660	5.268	2617.	.2213-03	.1421-06	4.076
137	.1000-01	.0000	4.020	72.40	750.0	177.2	.4640	5.255	2622.	.2200-03	.1426-06	4.043
138	.1000-01	.0000	4.020	72.30	751.0	177.5	.4640	5.247	2624.	.2192-03	.1429-06	4.026
139	.1000-01	.0000	4.020	72.60	751.0	177.5	.4660	5.268	2624.	.2201-03	.1429-06	4.043
140	.1000-01	.0000	4.020	72.60	750.0	177.2	.4660	5.267	2622.	.2205-03	.1426-06	4.052
141	.1000-01	.0000	4.020	72.60	749.0	177.0	.4650	5.264	2621.	.2206-03	.1425-06	4.056

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
136	.5109-01	.1139-01
137	.5106-01	.1143-01
138	.5103-01	.1146-01
139	.5113-01	.1143-01
140	.5112-01	.1142-01
141	.5110-01	.1142-01

TEST DATA

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
137	.00000	.25000 01	2187.0	.4938	.6318	.5887	.9631	.3006-01	.2521-01	4.327	30.08	578.2
137	.00000	.30000-01	2188.0	.5094	.6534	.6090	.9629	.3109-01	.2601-01	4.425	30.94	579.7
136	.00000	.40000-01	600.00	.5489	.6706	.6444	.9591	.3293-01	.2804-01	5.771	37.21	541.2
136	.00000	.50000-01	601.00	.4092	.5068	.4937	.9556	.2522-01	.2091-01	4.052	26.05	553.2
136	.00000	.70000-01	603.00	.3225	.3939	.3957	.9490	.2022-01	.1648-01	3.393	23.22	541.1
136	.00000	.80000-01	604.00	.3154	.3834	.3901	.9460	.1993-01	.1612-01	3.396	22.21	536.3
136	.00000	.15000	606.00	.1342	.1590	.1718	.9297	.8778-02	.6857-02	1.645	12.21	507.1
136	.00000	.20000	607.00	.7140-01	.8420-01	.9300-01	.9236	.4753-02	.3648-02	.8960	5.981	501.5
136	.00000	.21000	608.00	.6480-01	.7720-01	.8620-01	.9229	.4404-02	.3309-02	.7670	5.385	515.2
136	.00000	.22000	609.00	.5220-01	.6220-01	.6960-01	.9224	.3555-02	.2666-02	.6170	4.667	515.4
136	.00000	.30000	610.00	.4660-01	.5580-01	.6280-01	.9220	.3207-02	.2379-02	.5370	3.721	521.4
136	.00000	.35000	611.00	.4480-01	.5330-01	.5960-01	.9220	.3044-02	.2289-02	.5380	3.649	511.9

IH72, EXTERNAL TANK W/PROTUBERANCES HU/HREF (RVZT39)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
136	.00000	.36000	612.00	.4410-01	.5240-01	.5860-01	.9220	.2994-02	.2252-02	.5290	3.622	511.9
136	.00000	.37500	614.00	.4680-01	.5580-01	.6240-01	.9220	.3189-02	.2394-02	.5590	3.825	513.3
138	.00000	.38000	615.00	.4760-01	.5650-01	.6300-01	.9220	.3217-02	.2430-02	.5820	3.985	511.6
138	.00000	.38500	616.00	.4630-01	.5480-01	.6120-01	.9220	.3124-02	.2361-02	.5660	3.876	511.3
138	.00000	.39500	618.00	.4140-01	.4900-01	.5470-01	.9220	.2791-02	.2112-02	.5090	3.495	510.3
138	.00000	.40000	619.00	.4200-01	.4970-01	.5540-01	.9220	.2829-02	.2141-02	.5160	3.523	510.2
138	.00000	.40500	620.00	.4080-01	.4820-01	.5370-01	.9220	.2738-02	.2084-02	.5110	3.506	506.1
138	.00000	.41000	621.00	.4020-01	.4750-01	.5290-01	.9220	.2698-02	.2051-02	.5010	3.436	507.0
138	.00000	.41500	622.00	.4200-01	.4970-01	.5540-01	.9220	.2825-02	.2142-02	.5190	3.548	508.8
138	.00000	.43000	625.00	.7230-01	.8600-01	.9620-01	.9220	.4909-02	.3688-02	.8690	5.932	515.6
138	.00000	.44000	626.00	.7580-01	.9030-01	.1011	.9220	.5161-02	.3871-02	.9070	6.191	516.8
138	.00000	.44500	627.00	.8530-01	.1019	.1144	.9220	.5838-02	.4355-02	1.005	6.906	520.5
138	.00000	.45000	628.00	.9790-01	.1174	.1321	.9220	.6740-02	.4996-02	1.132	7.763	524.7
136	.00000	.46000	630.00	.8910-01	.1080	.1225	.9220	.6261-02	.4550-02	.9700	6.565	533.8
136	.00000	.47000	631.00	.6630-01	.7950-01	.8960-01	.9220	.4577-02	.3386-02	.7580	5.159	523.0
136	.00000	.48000	632.00	.4620-01	.5500-01	.6170-01	.9220	.3151-02	.2358-02	.5460	3.754	515.4
136	.00000	.49000	633.00	.3050-01	.3620-01	.4050-01	.9220	.2070-02	.1558-02	.3670	2.548	511.5
136	.00000	.50000	634.00	.2270-01	.2700-01	.3010-01	.9220	.1540-02	.1159-02	.2730	1.946	511.3
136	.00000	.55000	635.00	.5500-01	.6600-01	.7440-01	.9220	.3800-02	.2809-02	.6280	4.221	523.4
136	.00000	.60000	636.00	.6130-01	.7340-01	.8260-01	.9220	.4220-02	.3130-02	.7070	4.616	521.3
136	.00000	.65000	637.00	.7210-01	.8650-01	.9740-01	.9220	.4977-02	.3685-02	.8270	5.416	522.5
136	.00000	.70000	638.00	.5630-01	.6760-01	.7610-01	.9220	.3890-02	.2875-02	.6420	4.447	523.7
136	.00000	.75000	639.00	.4740-01	.5680-01	.6380-01	.9220	.3261-02	.2421-02	.5480	3.579	520.8
136	.00000	.80000	640.00	.5780-01	.6910-01	.7750-01	.9220	.3961-02	.2956-02	.6790	4.317	517.4
136	.00000	.85000	641.00	.6180-01	.7360-01	.8250-01	.9220	.4213-02	.3157-02	.7340	4.714	514.6
136	.00000	.87000	643.00	.6610-01	.7870-01	.8810-01	.9220	.4501-02	.3377-02	.7870	5.163	513.8
136	.00000	.88000	644.00	.6260-01	.7460-01	.8350-01	.9220	.4265-02	.3200-02	.7470	4.944	513.5
138	.00000	.95000	649.00	.7370-01	.8740-01	.9760-01	.9220	.4980-02	.3762-02	.9010	6.689	511.8
141	5.6250	.42500	2170.0	.5650-01	.6810-01	.7690-01	.9220	.3929-02	.2889-02	.6380	4.191	528.3
141	5.6250	.43000	2175.0	.7370-01	.8870-01	.1002	.9220	.5118-02	.3766-02	.8330	5.472	527.9
141	5.6250	.44000	2180.0	.8440-01	.1020	.1156	.9220	.5906-02	.4311-02	.9330	6.110	532.8
138	11.250	.35000	650.00	.4680-01	.5550-01	.6190-01	.9220	.3158-02	.2388-02	.5740	3.926	511.0
138	11.250	.36000	651.00	.5240-01	.6230-01	.6970-01	.9220	.3555-02	.2675-02	.6330	4.339	514.5
138	11.250	.37000	652.00	.4820-01	.5720-01	.6390-01	.9220	.3260-02	.2462-02	.5890	4.033	511.8
138	11.250	.37500	653.00	.4410-01	.5220-01	.5820-01	.9220	.2970-02	.2249-02	.5420	3.725	510.0
138	11.250	.38000	654.00	.4010-01	.4740-01	.5290-01	.9220	.2698-02	.2045-02	.4960	3.406	508.9
138	11.250	.39500	657.00	.3400-01	.4030-01	.4490-01	.9220	.2290-02	.1737-02	.4220	2.898	508.6
138	11.250	.40500	659.00	.3140-01	.3710-01	.4140-01	.9220	.2112-02	.1600-02	.3870	2.665	509.6
138	11.250	.41500	661.00	.4370-01	.5190-01	.5800-01	.9220	.2960-02	.2232-02	.5320	3.635	513.1
138	11.250	.42000	662.00	.6080-01	.7270-01	.8170-01	.9220	.4169-02	.3104-02	.7120	4.863	521.8
138	11.250	.42500	663.00	.7410-01	.8920-01	.1006	.9220	.5134-02	.3782-02	.8410	5.742	528.7
138	11.250	.43000	664.00	.8680-01	.1052	.1194	.9220	.6093-02	.4430-02	.9510	6.526	536.5
138	11.250	.44000	665.00	.7850-01	.9470-01	.1071	.9220	.5464-02	.4007-02	.8800	6.016	531.6

IH72, EXTERNAL TANK W/PROTUBERANCES HU/HREF

(RVZT39)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
138	11.250	.45000	666.00	.6820-01	.8150-01	.9150-01	.9220	.4671-02	.3482-02	.8020	5.509	521.0
138	11.250	.45500	667.00	.5960-01	.7110-01	.7970-01	.9220	.4068-02	.3039-02	.7040	4.843	519.5
138	11.250	.46000	668.00	.5660-01	.6750-01	.7560-01	.9220	.3857-02	.2890-02	.6760	4.667	517.4
138	11.250	.47000	669.00	.5270-01	.6280-01	.7040-01	.9220	.3593-02	.2687-02	.6250	4.323	518.8
138	11.250	.48000	670.00	.5380-01	.6420-01	.7190-01	.9220	.3669-02	.2748-02	.6410	4.441	517.9
138	11.250	.49000	671.00	.5410-01	.6450-01	.7230-01	.9220	.3689-02	.2762-02	.6440	4.447	518.0
138	11.250	.50000	672.00	.5480-01	.6530-01	.7330-01	.9220	.3739-02	.2795-02	.6480	4.570	519.3
138	11.250	.70000	674.00	.4010-01	.4780-01	.5360-01	.9220	.2733-02	.2044-02	.4750	3.280	518.8
138	11.250	.85000	676.00	.4500-01	.5320-01	.5920-01	.9220	.3021-02	.2297-02	.5620	3.644	506.7
138	11.250	.86000	677.00	.4870-01	.5760-01	.6410-01	.9220	.3270-02	.2487-02	.6090	3.971	506.6
138	11.250	.87000	678.00	.5030-01	.5940-01	.6610-01	.9220	.3375-02	.2568-02	.6290	4.144	506.2
138	11.250	.88000	679.00	.4940-01	.5840-01	.6510-01	.9220	.3321-02	.2523-02	.6160	4.098	507.3
138	11.250	.90000	681.00	.5100-01	.6030-01	.6720-01	.9220	.3427-02	.2603-02	.6350	4.365	507.5
138	11.250	.91000	682.00	.5110-01	.6030-01	.6700-01	.9220	.3419-02	.2607-02	.6430	4.794	504.5
138	11.250	.92600	683.00	.1129	.1357	.1530	.9220	.7809-02	.5762-02	1.287	9.513	527.8
138	11.250	.95000	684.00	.6110-01	.7240-01	.8070-01	.9220	.4119-02	.3121-02	.7540	5.551	509.6
138	17.000	.33000	685.00	.4270-01	.5060-01	.5640-01	.9220	.2877-02	.2179-02	.5260	3.601	509.9
138	17.000	.34000	686.00	.4450-01	.5270-01	.5870-01	.9220	.2998-02	.2270-02	.5480	3.752	509.9
138	17.000	.35000	687.00	.5280-01	.6270-01	.7010-01	.9220	.3580-02	.2695-02	.6380	4.362	514.3
141	17.000	.35500	2102.0	.5750-01	.6870-01	.7700-01	.9220	.3935-02	.2940-02	.6800	4.512	518.0
138	17.000	.36000	688.00	.5350-01	.6360-01	.7110-01	.9220	.3626-02	.2730-02	.6480	4.427	514.0
138	17.000	.37000	689.00	.3980-01	.4700-01	.5230-01	.9220	.2668-02	.2030-02	.4970	3.412	506.3
138	17.000	.37500	690.00	.3350-01	.3950-01	.4380-01	.9220	.2236-02	.1709-02	.4250	2.930	502.6
141	17.000	.42500	2171.0	.9450-01	.1150	.1308	.9220	.6681-02	.4831-02	1.020	6.566	538.1
141	17.000	.43000	2176.0	.1002	.1226	.1401	.9220	.7157-02	.5119-02	1.050	6.841	544.0
136	17.000	.50000	691.00	.8490-01	.1021	.1151	.9220	.5882-02	.4338-02	.9630	6.544	525.0
136	17.000	.60000	692.00	.3500-01	.4150-01	.4620-01	.9220	.2363-02	.1787-02	.4270	2.810	508.0
136	17.000	.70000	693.00	.3090-01	.3700-01	.4160-01	.9220	.2124-02	.1578-02	.3580	2.460	520.2
136	17.000	.80000	694.00	.3960-01	.4710-01	.5270-01	.9220	.2694-02	.2025-02	.4750	3.039	512.4
136	17.000	.92600	696.00	.1152	.1397	.1586	.9220	.8104-02	.5884-02	1.252	9.219	534.3
141	20.980	.35500	2098.0	.5810-01	.6910-01	.7740-01	.9220	.3955-02	.2968-02	.6940	4.687	515.1
141	20.980	.36000	2099.0	.5290-01	.6270-01	.7000-01	.9220	.3579-02	.2703-02	.6450	4.325	510.5
141	20.980	.36500	2100.0	.5040-01	.5950-01	.6630-01	.9220	.3386-02	.2574-02	.6270	4.218	505.4
141	23.070	.35500	2094.0	.6380-01	.7650-01	.8610-01	.9220	.4399-02	.3260-02	.7360	4.900	523.4
141	23.070	.36000	2095.0	.5830-01	.6930-01	.7750-01	.9220	.3962-02	.2977-02	.7000	4.685	514.0
141	23.070	.36500	2096.0	.5050-01	.5970-01	.6650-01	.9220	.3399-02	.2581-02	.6270	4.213	506.2
140	23.070	.43500	2000.0	.9110-01	.1102	.1249	.9220	.6382-02	.4654-02	1.005	6.488	533.8
140	23.070	.56890	2001.0	.3950-01	.4700-01	.5270-01	.9220	.2691-02	.2017-02	.4710	3.274	516.4
140	23.070	.70270	2002.0	.4790-01	.5740-01	.6450-01	.9220	.3296-02	.2449-02	.5570	4.023	522.3
140	23.070	.83500	2003.0	.5920-01	.7040-01	.7870-01	.9220	.4023-02	.3026-02	.7140	4.613	514.0
140	23.070	.90000	2004.0	.5220-01	.6200-01	.6940-01	.9220	.3545-02	.2668-02	.6310	4.312	5.3.4
141	23.070	.92600	2154.0	.6060-01	.7280-01	.8200-01	.9220	.4191-02	.3099-02	.6950	5.011	524.9
136	29.800	.70000-01	700.00	.3662	.4494	.4515	.9490	.2307-01	.1871-01	3.772	25.53	545.4

IH72. EXTERNAL TANK W/PROTUBERANCES HU/HREF (RVZT39)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
136	29.800	.10000+00	701.00	.2485	.2973	.3089	.9404	.1578-01	.1270-01	2.891	18.69	519.3
136	29.800	.15000	702.00	.1418	.1677	.1811	.9297	.9254-02	.7246-02	1.753	12.81	505.1
136	29.800	.20000	703.00	.7100-01	.8340-01	.9190-01	.9236	.4696-02	.3627-02	.9100	6.222	496.1
136	29.800	.30000	704.00	.5870-01	.7060-01	.7970-01	.9220	.4073-02	.3001-02	.6640	4.757	525.7
136	29.800	.35000	705.00	.7200-01	.8640-01	.9720-01	.9220	.4969-02	.3677-02	.8240	5.708	522.9
141	29.800	.35500	2090.0	.7700-01	.9260-01	.1045	.9220	.5340-02	.3932-02	.8710	5.791	527.5
141	29.800	.36500	2092.0	.6760-01	.8110-01	.9130-01	.9220	.4664-02	.3453-02	.7770	5.158	524.1
141	29.800	.37000	2093.0	.5290-01	.6310-01	.7080-01	.9220	.3615-02	.2703-02	.6260	4.184	517.5
138	29.800	.50000	707.00	.5790-01	.6930-01	.7780-01	.9220	.3971-02	.2956-02	.6770	4.696	522.0
138	29.800	.60000	708.00	.5440-01	.6460-01	.7220-01	.9220	.3684-02	.2779-02	.6630	4.299	512.7
138	29.800	.70000	709.00	.4770-01	.5700-01	.6400-01	.9220	.3265-02	.2435-02	.5620	3.628	520.6
138	29.800	.80000	710.00	.5580-01	.6600-01	.7360-01	.9220	.3757-02	.2846-02	.6880	4.369	509.5
141	31.430	.44000	2166.0	.9670-01	.1176	.1337	.9220	.6833-02	.4943-02	1.044	6.963	538.0
140	31.430	.47600	2005.0	.7210-01	.8680-01	.9790-01	.9220	.5004-02	.3687-02	.8200	5.497	527.5
140	31.430	.51100	2006.0	.6160-01	.7400-01	.8330-01	.9220	.4260-02	.3148-02	.7060	4.881	525.7
140	31.430	.54600	2007.0	.3220-01	.3840-01	.4290-01	.9220	.2195-02	.1647-02	.3860	2.754	515.4
140	31.430	.61600	2009.0	.5200-01	.6210-01	.6970-01	.9220	.3565-02	.2658-02	.6110	4.244	519.8
140	31.430	.65000	2010.0	.6800-01	.8140-01	.9140-01	.9220	.4674-02	.3478-02	.7950	5.599	521.2
140	31.430	.68600	2014.0	.5640-01	.6760-01	.7610-01	.9220	.3892-02	.2883-02	.6510	4.590	524.1
140	31.430	.72050	2015.0	.3110-01	.3720-01	.4180-01	.9220	.2134-02	.1591-02	.3660	2.750	520.0
140	31.430	.79040	2017.0	.7190-01	.8580-01	.9610-01	.9220	.4914-02	.3676-02	.8530	5.473	517.7
140	31.430	.86000	2019.0	.1250-01	.1510-01	.1700-01	.9220	.8703-03	.6384-03	.1400	.9110	530.4
140	31.430	.89520	2020.0	.6790-01	.8080-01	.9030-01	.9220	.4615-02	.3473-02	.8210	5.429	513.5
141	31.430	.92600	2153.0	.4880-01	.5820-01	.6520-01	.9220	.3331-02	.2493-02	.5790	4.285	517.0
140	33.750	.25000	2079.0	.4960-01	.5950-01	.6700-01	.9220	.3423-02	.2535-02	.5710	4.743	524.5
140	33.750	.30000	2080.0	.6230-01	.7500-01	.8470-01	.9220	.4328-02	.3186-02	.7060	4.693	528.2
140	33.750	.37500	2081.0	.5920-01	.7080-01	.7950-01	.9220	.4062-02	.3028-02	.6960	4.684	520.0
140	33.750	.40000	2082.0	.8760-01	.1069	.1220	.9220	.6237-02	.4476-02	.9270	6.170	542.7
140	33.750	.45000	2084.0	.7240-01	.8670-01	.9750-01	.9220	.4984-02	.3699-02	.8390	5.642	522.9
140	33.750	.60000	2085.0	.5070-01	.6040-01	.6770-01	.9220	.3462-02	.2589-02	.6000	4.046	517.9
141	33.750	.65000	2086.0	.7500-01	.8810-01	.9770-01	.9220	.4991-02	.3833-02	.9650	6.634	497.3
141	33.750	.92600	2152.0	.4530-01	.5400-01	.6040-01	.9220	.3086-02	.2316-02	.5420	4.021	514.9
140	36.320	.25000	2066.0	.6260-01	.7500-01	.8430-01	.9220	.4310-02	.3200-02	.7270	4.887	522.7
140	36.320	.30000	2067.0	.5890-01	.7100-01	.8020-01	.9220	.4099-02	.3011-02	.6640	4.406	529.4
140	36.320	.35000	2069.0	.6310-01	.7560-01	.8490-01	.9220	.4342-02	.3227-02	.7350	4.943	522.0
140	36.320	.37500	2070.0	.6030-01	.7210-01	.8100-01	.9220	.4142-02	.3080-02	.7030	4.728	521.6
140	36.320	.40000	2071.0	.7680-01	.9270-01	.1049	.9220	.5364-02	.3926-02	.8570	5.733	531.6
140	36.320	.42000	2072.0	.6650-01	.8000-01	.9040-01	.9220	.4618-02	.3399-02	.7530	5.045	528.4
140	36.320	.42500	2073.0	.7140-01	.8620-01	.9750-01	.9220	.4984-02	.3648-02	.7960	5.328	531.6
140	36.320	.43000	2074.0	.7160-01	.8610-01	.9710-01	.9220	.4963-02	.3658-02	.8140	5.459	527.3
140	36.320	.43500	2075.0	.7780-01	.9370-01	.1059	.9220	.5412-02	.3976-02	.8770	5.874	529.4
140	36.320	.60000	2077.0	.4810-01	.5720-01	.6410-01	.9220	.3275-02	.2457-02	.5750	3.915	515.8
140	36.320	.65000	2078.0	.5650-01	.6770-01	.7600-01	.9220	.3887-02	.2890-02	.6590	4.569	521.8

IH72, EXTERNAL TANK W/PROTUBERANCES

(RVZT39)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
138	37.700	.50000-01	715.00	.3754	.4601	.4487	.9556	.2290-01	.1916-01	3.908	25.49	547.2
138	37.700	.70000-01	716.00	.3456	.4231	.4250	.9490	.2169-01	.1764-01	3.619	24.70	546.1
138	37.700	.10000+00	717.00	.2139	.2531	.2623	.9404	.1339-01	.1092-01	2.648	17.51	508.7
138	37.700	.15000	718.00	.6470-01	.7750-01	.8430-01	.9297	.4300-02	.3303-02	.7520	5.565	523.7
138	37.700	.20000	719.00	.6940-01	.8130-01	.8930-01	.9236	.4559-02	.3541-02	.9100	6.301	494.3
136	37.700	.30000	720.00	.5430-01	.6510-01	.7330-01	.9220	.3741-02	.2773-02	.6280	4.543	524.8
136	37.700	.35000	721.00	.5870-01	.7020-01	.7880-01	.9220	.4027-02	.2999-02	.6850	4.813	518.7
136	37.700	.37500	722.00	.6040-01	.7230-01	.8120-01	.9220	.4149-02	.3085-02	.7010	4.926	519.8
136	37.700	.50000	723.00	.6490-01	.7740-01	.8670-01	.9220	.4431-02	.3317-02	.7690	5.397	515.3
136	37.700	.60000	724.00	.5810-01	.6900-01	.7710-01	.9220	.3940-02	.2968-02	.7020	4.568	510.7
136	37.700	.70000	725.00	.4750-01	.5700-01	.6410-01	.9220	.3274-02	.2429-02	.5490	3.533	521.1
136	37.700	.80000	726.00	.4500-01	.5350-01	.5980-01	.9220	.3056-02	.2301-02	.5430	3.476	511.0
136	37.700	.87000	727.00	.7770-01	.9260-01	.1037	.9220	.5300-02	.3972-02	.9230	6.000	514.5
136	37.700	.92600	728.00	.6150-01	.7340-01	.8240-01	.9220	.4211-02	.3142-02	.7210	5.320	517.5
137	39.000	.10000-01	993.00	.4934	.6313	.5851	.9641	.2987-01	.2519-01	4.323	30.94	578.2
137	39.000	.25000-01	994.00	.3745	.4610	.4347	.9631	.2219-01	.1912-01	3.823	25.97	549.9
140	45.000	.25000	2036.0	.2890-01	.3450-01	.3860-01	.9220	.1974-02	.1477-02	.3430	2.816	517.7
140	45.000	.32500	2038.0	.4370-01	.5220-01	.5840-01	.9220	.2987-02	.2236-02	.5200	3.614	517.2
140	45.000	.35000	2039.0	.4600-01	.5480-01	.6140-01	.9220	.3136-02	.2349-02	.5480	3.748	516.7
140	45.000	.37500	2040.0	.4960-01	.5920-01	.6640-01	.9220	.3395-02	.2537-02	.5870	4.013	518.5
140	45.000	.40000	2041.0	.5230-01	.6250-01	.7020-01	.9220	.3588-02	.2674-02	.6150	4.200	520.0
140	45.000	.42000	2042.0	.4940-01	.5900-01	.6620-01	.9220	.3383-02	.2523-02	.5800	3.965	519.9
140	45.000	.42500	2043.0	.5190-01	.6200-01	.6960-01	.9220	.3557-02	.2653-02	.6110	4.178	519.5
140	45.000	.43000	2044.0	.5280-01	.6310-01	.7090-01	.9220	.3623-02	.2699-02	.6190	4.227	520.6
140	45.000	.43500	2045.0	.5400-01	.6450-01	.7250-01	.9220	.3706-02	.2758-02	.6300	4.305	521.3
140	45.000	.44000	2046.0	.5740-01	.6870-01	.7720-01	.9220	.3945-02	.2932-02	.6670	4.556	522.2
140	45.000	.45000	2047.0	.5470-01	.6550-01	.7350-01	.9220	.3759-02	.2797-02	.6390	4.393	521.2
140	45.000	.47000	2048.0	.5220-01	.6240-01	.7000-01	.9220	.3577-02	.2669-02	.6150	4.268	519.4
140	45.000	.55000	2049.0	.3240-01	.3860-01	.4320-01	.9220	.2208-02	.1657-02	.3880	2.710	515.4
140	45.000	.60000	2050.0	.4600-01	.5480-01	.6130-01	.9220	.3134-02	.2352-02	.5520	3.778	515.3
140	45.000	.65000	2051.0	.5160-01	.6170-01	.6920-01	.9220	.3539-02	.2640-02	.6080	4.104	519.6
140	45.000	.75000	2052.0	.3430-01	.4100-01	.4600-01	.9220	.2350-02	.1754-02	.4050	2.608	519.2
140	45.000	.80000	2053.0	.5280-01	.6290-01	.7040-01	.9220	.3597-02	.2700-02	.6330	4.042	515.4
140	45.000	.83000	2054.0	.5340-01	.6350-01	.7110-01	.9220	.3632-02	.2728-02	.6410	4.081	514.9
140	45.000	.84000	2055.0	.9750-01	.1164	.1307	.9220	.6680-02	.4982-02	1.146	7.282	519.8
140	45.000	.85000	2056.0	.8670-01	.1033	.1158	.9220	.5919-02	.4432-02	1.032	6.657	517.1
140	45.000	.86000	2057.0	.4080-01	.4840-01	.5400-01	.9220	.2762-02	.2088-02	.5000	3.314	510.3
140	45.000	.87000	2058.0	.4570-01	.5430-01	.6060-01	.9220	.3096-02	.2338-02	.5580	3.786	511.1
140	45.000	.89000	2060.0	.6060-01	.7190-01	.8040-01	.9220	.4110-02	.3096-02	.7340	4.989	512.8
140	45.000	.90000	2061.0	.4690-01	.5540-01	.6170-01	.9220	.3154-02	.2399-02	.5860	4.011	505.5
140	45.000	.91000	2062.0	.4010-01	.4820-01	.5430-01	.9220	.2775-02	.2051-02	.4600	3.800	525.7
140	45.000	.92600	2063.0	.7050-01	.8400-01	.9410-01	.9220	.4811-02	.3605-02	.8410	6.031	516.6
140	45.000	.93500	2064.0	.1121	.1352	.1529	.9220	.7813-02	.5729-02	1.256	9.453	530.6

IH72, EXTERNAL TANK W/PROTUBERANCES HU/HREF

(RVZT39)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
140	45.000	.94500	2065.0	.5080-01	.6040-01	.6760-01	.9220	.3455-02	.2594-02	.6090	4.111	515.0
136	180.00	.20000-01	2183.0	.5231	.6838	.6328	.9631	.3233-01	.2673-01	4.248	31.60	588.1
136	180.00	.25000-01	2184.0	.4948	.6288	.5871	.9631	.3000-01	.2528-01	4.432	31.93	571.7
136	180.00	.30000-01	2185.0	.4823	.6163	.5749	.9629	.2938-01	.2464-01	4.232	30.23	575.3
136	180.00	.40000-01	737.00	.4387	.5430	.5203	.9592	.2658-01	.2242-01	4.360	28.37	552.5
136	180.00	.45000-01	738.00	.4445	.5500	.5314	.9574	.2715-01	.2271-01	4.423	29.21	552.2
136	180.00	.60000-01	739.00	.3618	.4416	.4373	.9522	.2234-01	.1848-01	3.818	25.75	540.4
136	180.00	.70000-01	740.00	.3085	.3752	.3768	.9490	.1925-01	.1576-01	3.314	22.52	536.8
136	180.00	.80000-01	741.00	.2622	.3173	.3228	.9460	.1649-01	.1340-01	2.879	21.09	532.1
136	180.00	.10000+00	742.00	.2205	.2649	.2755	.9405	.1408-01	.1127-01	2.513	16.99	524.0
136	180.00	.12500	743.00	.1649	.1977	.2107	.9345	.1076-01	.8423-02	1.895	13.95	522.1
136	180.00	.15000	744.00	.1306	.1559	.1691	.9298	.8641-02	.6675-02	1.540	10.87	516.3
136	180.00	.17500	745.00	.8650-01	.1029	.1131	.9261	.5778-02	.4420-02	1.038	7.944	512.1
136	180.00	.20000	746.00	.6120-01	.7270-01	.8070-01	.9236	.4124-02	.3128-02	.7400	5.390	510.5
136	180.00	.21500	747.00	.5210-01	.6250-01	.7010-01	.9226	.3584-02	.2664-02	.5990	4.207	522.0
136	180.00	.23000	748.00	.4140-01	.4980-01	.5610-01	.9221	.2866-02	.2114-02	.4690	3.504	525.2
136	180.00	.24000	749.00	.3300-01	.3980-01	.4500-01	.9220	.2300-02	.1685-02	.3670	2.791	529.3
136	180.00	.25000	750.00	.1450-01	.1750-01	.1970-01	.9220	.1009-02	.7395-03	.1610	1.317	528.9
136	180.00	.30000	751.00	.4050-01	.4900-01	.5560-01	.9220	.2840-02	.2068-02	.4430	2.929	532.7
136	180.00	.35000	752.00	.4360-01	.5240-01	.5910-01	.9220	.3021-02	.2228-02	.4950	3.161	525.0
136	180.00	.40000	753.00	.4510-01	.5390-01	.6040-01	.9220	.3086-02	.2305-02	.5310	3.465	516.8
136	180.00	.50000	754.00	.4350-01	.5160-01	.5770-01	.9220	.2947-02	.2224-02	.5290	3.525	509.4
136	180.00	.60000	755.00	.3920-01	.4720-01	.5320-01	.9220	.2719-02	.2005-02	.4450	2.884	525.1
136	180.00	.70000	756.00	.4010-01	.4840-01	.5480-01	.9220	.2799-02	.2047-02	.4440	2.954	530.2
136	180.00	.80000	757.00	.3650-01	.4420-01	.5010-01	.9220	.2559-02	.1866-02	.4020	2.538	531.7
136	235.00	.22000	759.00	.4930-01	.5900-01	.6630-01	.9224	.3386-02	.2519-02	.5710	4.303	520.5
136	235.00	.25000	760.00	.2200-01	.2640-01	.2970-01	.9220	.1517-02	.1125-02	.2530	2.009	521.9
136	235.00	.27000	761.00	.1640-01	.1970-01	.2220-01	.9220	.1135-02	.8401-03	.1880	1.419	522.7
136	235.00	.30000	762.00	.4370-01	.5260-01	.5940-01	.9220	.3035-02	.2234-02	.4930	2.995	526.3
136	235.00	.32000	763.00	.4220-01	.5070-01	.5720-01	.9220	.2921-02	.2157-02	.4800	2.875	524.3
136	235.00	.34000	764.00	.4470-01	.5360-01	.6030-01	.9220	.3080-02	.2286-02	.5170	3.107	520.9
136	235.00	.36000	765.00	.4240-01	.5070-01	.5700-01	.9220	.2910-02	.2166-02	.4940	3.012	519.0
136	235.00	.38000	766.00	.4330-01	.5170-01	.5790-01	.9220	.2959-02	.2214-02	.5120	3.163	515.6
138	247.00	.23000	768.00	.4440-01	.5300-01	.5950-01	.9221	.3036-02	.2265-02	.5220	3.937	520.7
138	247.00	.25000	769.00	.2410-01	.2880-01	.3240-01	.9220	.1653-02	.1231-02	.2820	2.225	521.8
138	247.00	.27000	770.00	.2080-01	.2500-01	.2820-01	.9220	.1441-02	.1064-02	.2380	1.754	527.4
138	247.00	.30000	772.00	.4170-01	.5020-01	.5660-01	.9220	.2889-02	.2130-02	.4750	2.929	528.3
138	247.00	.31000	773.00	.4440-01	.5330-01	.6010-01	.9220	.3068-02	.2267-02	.5090	3.117	526.7
138	247.00	.32000	774.00	.4410-01	.5290-01	.5950-01	.9220	.3037-02	.2249-02	.5080	3.088	525.4
138	247.00	.32500	775.00	.4070-01	.4870-01	.5480-01	.9220	.2798-02	.2075-02	.4700	2.869	524.5
138	247.00	.33000	776.00	.4320-01	.5170-01	.5820-01	.9220	.2970-02	.2203-02	.5000	3.057	524.3
138	247.00	.33500	777.00	.4390-01	.5260-01	.5910-01	.9220	.3018-02	.2241-02	.5100	3.122	523.5
138	247.00	.34000	778.00	.4630-01	.5540-01	.6230-01	.9220	.3177-02	.2364-02	.5410	3.311	522.4

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, EXTERNAL TANK W/PROTUBERANCES HU/HREF

(RVZT39)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
138	247.00	.34500	779.00	.4270-01	.5110-01	.5740-01	.9220	.2928-02	.2181-02	.5010	3.075	521.6
138	247.00	.35000	780.00	.4340-01	.5180-01	.5810-01	.9220	.2965-02	.2214-02	.5120	3.158	519.8
138	247.00	.35500	781.00	.4280-01	.5120-01	.5740-01	.9220	.2929-02	.2186-02	.5050	3.119	520.3
136	247.00	.36000	782.00	.4420-01	.5280-01	.5930-01	.9220	.3030-02	.2257-02	.5150	3.183	518.9
136	247.00	.36500	783.00	.4420-01	.5280-01	.5920-01	.9220	.3026-02	.2257-02	.5170	3.192	517.8
136	247.00	.37000	784.00	.4880-01	.5820-01	.6530-01	.9220	.3335-02	.2494-02	.5760	3.579	515.9
136	247.00	.38000	786.00	.4570-01	.5450-01	.6100-01	.9220	.3118-02	.2337-02	.5440	3.416	514.3
136	247.00	.39000	787.00	.4520-01	.5370-01	.6010-01	.9220	.3069-02	.2310-02	.5440	3.433	511.5
136	247.00	.40000	788.00	.4040-01	.4790-01	.5350-01	.9220	.2734-02	.2062-02	.4890	3.113	509.9
137	247.00	.50000	789.00	.4760-01	.5530-01	.6070-01	.9220	.3100-02	.2432-02	.6600	4.380	478.6
137	247.00	.60000	790.00	.4130-01	.4930-01	.5520-01	.9220	.2820-02	.2107-02	.4870	3.245	518.5
137	247.00	.70000	791.00	.4150-01	.4910-01	.5460-01	.9220	.2790-02	.2121-02	.5170	3.726	506.1
137	247.00	.80000	792.00	.3990-01	.4730-01	.5290-01	.9220	.2700-02	.2036-02	.4840	3.094	512.2
137	247.00	.90000	793.00	.1870-01	.2200-01	.2440-01	.9220	.1247-02	.9523-03	.2350	1.553	502.6
141	247.00	.92600	2144.0	.2710-01	.3300-01	.3760-01	.9220	.1923-02	.1385-02	.2890	2.030	540.3
141	247.00	.93000	2149.0	.2890-01	.3560-01	.4090-01	.9220	.2092-02	.1476-02	.2930	2.109	550.8
141	250.57	.92600	2143.0	.2240-01	.2750-01	.3140-01	.9220	.1607-02	.1147-02	.2340	1.639	545.1
141	250.57	.93000	2148.0	.4470-01	.5520-01	.6360-01	.9220	.3252-02	.2284-02	.4480	3.157	552.8
141	250.57	.93700	2087.0	.2535	.3111	.3565	.9220	.1822-01	.1295-01	2.617	18.66	547.0
137	258.00	.27000	794.00	.2040-01	.2440-01	.2740-01	.9220	.1400-02	.1042-02	.2380	1.719	521.4
137	258.00	.29000	795.00	.3200-01	.3830-01	.4300-01	.9220	.2198-02	.1633-02	.3710	2.318	522.3
139	258.00	.32000	798.00	.4370-01	.5230-01	.5880-01	.9220	.3005-02	.2234-02	.5100	3.112	522.8
139	258.00	.34000	802.00	.5130-01	.6140-01	.6900-01	.9220	.3526-02	.2623-02	.6000	3.672	522.4
139	258.00	.34500	803.00	.5290-01	.6340-01	.7130-01	.9220	.3645-02	.2707-02	.6160	3.780	523.5
139	258.00	.35500	805.00	.5410-01	.6480-01	.7280-01	.9220	.3724-02	.2767-02	.6310	3.872	523.1
139	258.00	.36000	806.00	.4870-01	.5810-01	.6510-01	.9220	.3329-02	.2490-02	.5790	3.569	518.7
139	258.00	.36500	807.00	.4430-01	.5270-01	.5890-01	.9220	.3014-02	.2263-02	.5320	3.295	516.0
139	258.00	.37000	808.00	.3950-01	.4690-01	.5240-01	.9220	.2680-02	.2019-02	.4790	2.980	513.6
139	258.00	.37500	809.00	.3850-01	.4560-01	.5090-01	.9220	.2603-02	.1966-02	.4710	2.931	511.6
139	258.00	.38000	810.00	.3570-01	.4230-01	.4710-01	.9220	.2410-02	.1824-02	.4400	2.755	509.9
137	258.00	.40000	812.00	.3730-01	.4400-01	.4900-01	.9220	.2503-02	.1903-02	.4650	2.924	505.7
141	258.00	.93500	2151.0	.5880-01	.7140-01	.8110-01	.9220	.4144-02	.3006-02	.6400	4.542	536.4
137	270.00	.40000-01	985.00	.4077	.5031	.4824	.9592	.2463-01	.2082-01	4.113	26.68	552.2
137	270.00	.50000-01	986.00	.4195	.5171	.5039	.9556	.2573-01	.2142-01	4.257	27.47	551.1
137	270.00	.60000-01	987.00	.3428	.4179	.4138	.9522	.2113-01	.1750-01	3.651	24.10	541.2
137	270.00	.70000-01	988.00	.3206	.3905	.3921	.9490	.2002-01	.1637-01	3.432	23.14	540.2
137	270.00	.80000-01	989.00	.2747	.3329	.3387	.9460	.1729-01	.1403-01	3.008	21.44	535.4
137	270.00	.10000+00	990.00	.2250	.2699	.2806	.9404	.1433-01	.1149-01	2.589	17.08	524.5
137	270.00	.15000	991.00	.1225	.1459	.1582	.9297	.8075-02	.6254-02	1.461	10.89	516.2
137	270.00	.20000	992.00	.6500-01	.7680-01	.8500-01	.9236	.4340-02	.3319-02	.8080	5.581	506.3
137	270.00	.23000	813.00	.4490-01	.5380-01	.6040-01	.9221	.3085-02	.2291-02	.5200	3.828	522.9
137	270.00	.24000	814.00	.3420-01	.4100-01	.4620-01	.9220	.2358-02	.1745-02	.3930	3.213	524.8
137	270.00	.25000	815.00	.2110-01	.2530-01	.2840-01	.9220	.1450-02	.1080-02	.2470	1.978	520.7

IH72. EXTERNAL TANK W/PROTUBERANCES HU/HREF (RVZT39)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
137	270.00	.27000	816.00	.1850-01	.2210-01	.2480-01	.9220	.1268-02	.9446-03	.2170	1.562	520.3
137	270.00	.29000	817.00	.3320-01	.3970-01	.4460-01	.9220	.2276-02	.1694-02	.3880	2.440	521.0
137	270.00	.30000	818.00	.4040-01	.4840-01	.5440-01	.9220	.2775-02	.2064-02	.4710	2.914	521.7
137	270.00	.31000	819.00	.4130-01	.4940-01	.5550-01	.9220	.2835-02	.2109-02	.4820	2.961	521.3
137	270.00	.32000	820.00	.4330-01	.5180-01	.5810-01	.9220	.2969-02	.2213-02	.5090	3.117	520.0
137	270.00	.32500	821.00	.4710-01	.5620-01	.6310-01	.9220	.3221-02	.2402-02	.5530	3.381	519.6
137	270.00	.33000	822.00	.6200-01	.7420-01	.8340-01	.9220	.4257-02	.3165-02	.7220	4.422	521.7
137	270.00	.33500	823.00	.8420-01	.1016	.1149	.9220	.5865-02	.4298-02	.9410	5.750	530.9
137	270.00	.34500	825.00	.9200-01	.1124	.1283	.9220	.6551-02	.4696-02	.9700	5.875	543.3
137	270.00	.36000	828.00	.3750-01	.4450-01	.4970-01	.9220	.2540-02	.1914-02	.4550	2.789	512.3
137	270.00	.37000	830.00	.9100-02	.1100-01	.1240-01	.9220	.6319-03	.4654-03	.1030	.6320	527.9
137	270.00	.37500	831.00	.4560-01	.5420-01	.6060-01	.9220	.3092-02	.2326-02	.5490	3.401	513.9
137	270.00	.38000	832.00	.4820-01	.5730-01	.6410-01	.9220	.3272-02	.2461-02	.5810	3.600	513.8
137	270.00	.39000	833.00	.5540-01	.6580-01	.7350-01	.9220	.3753-02	.2830-02	.6730	4.225	511.9
137	270.00	.40000	834.00	.5750-01	.6810-01	.7600-01	.9220	.3880-02	.2934-02	.7030	4.429	510.1
137	270.00	.50000	835.00	.5780-01	.6860-01	.7670-01	.9220	.3918-02	.2949-02	.6970	4.481	513.5
137	270.00	.60000	836.00	.5710-01	.6810-01	.7640-01	.9220	.3902-02	.2915-02	.6740	4.553	518.6
137	270.00	.70000	837.00	.5130-01	.6070-01	.6770-01	.9220	.3456-02	.2618-02	.6320	4.536	508.5
137	270.00	.80000	838.00	.5010-01	.5930-01	.6620-01	.9220	.3378-02	.2558-02	.6170	3.907	508.8
137	270.00	.90000	839.00	.3190-01	.3750-01	.4160-01	.9220	.2122-02	.1627-02	.4080	2.675	498.9
141	270.00	.92600	2141.0	.4610-01	.5480-01	.6130-01	.9220	.3132-02	.2358-02	.5570	3.881	512.8
141	270.00	.93000	2140.0	.5780-01	.6890-01	.7720-01	.9220	.3944-02	.2954-02	.6880	4.935	516.3
141	270.00	.93500	2150.0	.5800-01	.6910-01	.7750-01	.9220	.3958-02	.2963-02	.6890	4.940	516.7
141	289.43	.92600	2140.0	.8660-01	.1046	.1184	.9220	.6051-02	.4425-02	.9630	6.787	531.6
141	289.43	.93000	2145.0	.9990-01	.1220	.1392	.9220	.7112-02	.5104-02	1.056	7.551	542.2
137	292.50	.23000	840.00	.4120-01	.4960-01	.5590-01	.9221	.2853-02	.2106-02	.4690	3.823	526.9
137	292.50	.25000	841.00	.2190-01	.2620-01	.2950-01	.9220	.1504-02	.1118-02	.2550	2.000	521.9
137	292.50	.27000	842.00	.1310-01	.1560-01	.1750-01	.9220	.8942-03	.6677-03	.1540	1.094	518.9
137	292.50	.35000	845.00	.4630-01	.5530-01	.6200-01	.9220	.3166-02	.2363-02	.5450	3.386	519.3
137	292.50	.37000	846.00	.5020-01	.5970-01	.6690-01	.9220	.3414-02	.2561-02	.6000	3.756	515.6
137	292.50	.40000	847.00	.3980-01	.4700-01	.5240-01	.9220	.2675-02	.2030-02	.4930	3.133	507.1
137	292.50	.45000	848.00	.4260-01	.5030-01	.5600-01	.9220	.2858-02	.2176-02	.5330	3.425	504.7
137	292.50	.50000	849.00	.4650-01	.5500-01	.6140-01	.9220	.3133-02	.2372-02	.5720	3.747	508.9
137	292.50	.60000	851.00	.4330-01	.5150-01	.5760-01	.9220	.2940-02	.2213-02	.5230	3.567	513.4
137	292.50	.65000	852.00	.4280-01	.5090-01	.5680-01	.9220	.2901-02	.2187-02	.5200	3.598	512.3
137	292.50	.70000	853.00	.4080-01	.4840-01	.5390-01	.9220	.2754-02	.2083-02	.5000	3.574	509.9
137	292.50	.75000	854.00	.3070-01	.3620-01	.4020-01	.9220	.2054-02	.1568-02	.3870	2.567	502.9
137	292.50	.80000	855.00	.3580-01	.4230-01	.4720-01	.9220	.2409-02	.1828-02	.4430	2.939	507.5
141	292.50	.82000	2129.0	.3890-01	.4610-01	.5140-01	.9220	.2625-02	.1987-02	.4770	2.981	509.0
141	292.50	.83000	2130.0	.4200-01	.4990-01	.5570-01	.9220	.2846-02	.2148-02	.5110	3.218	511.1
141	292.50	.85000	2132.0	.3950-01	.4680-01	.5220-01	.9220	.2669-02	.2017-02	.4820	3.053	510.0
141	292.50	.86000	2133.0	.4130-01	.4900-01	.5470-01	.9220	.2793-02	.2110-02	.5040	3.174	510.2
141	292.50	.87000	2134.0	.4260-01	.5050-01	.5640-01	.9220	.2884-02	.2177-02	.5190	3.285	510.7

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, EXTERNAL TANK W/PROTUBERANCES HU/HREF

(RVZT39)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
141	292.50	.88000	2135.0	.3970-01	.4710-01	.5260-01	.9220	.2688-02	.2028-02	.4820	3.052	511.3
141	292.50	.89000	2136.0	.3640-01	.4320-01	.4830-01	.9220	.2466-02	.1860-02	.4420	2.807	511.3
137	292.50	.90000	856.00	.2230-01	.2630-01	.2920-01	.9220	.1489-02	.1139-02	.2830	1.881	501.0
141	292.50	.92600	2138.0	.8040-01	.9690-01	.1094	.9220	.5592-02	.4107-02	.9040	6.381	529.0
141	292.50	.93000	2139.0	.8750-01	.1063	.1208	.9220	.6175-02	.4471-02	.9470	6.827	537.4
141	301.50	.82000	2116.0	.3440-01	.4080-01	.4550-01	.9220	.2326-02	.1759-02	.4210	2.633	509.5
141	301.50	.83000	2117.0	.3720-01	.4410-01	.4920-01	.9220	.2513-02	.1900-02	.4560	2.830	509.4
141	301.50	.83500	2118.0	.3970-01	.4710-01	.5260-01	.9220	.2686-02	.2031-02	.4860	2.996	509.7
141	301.50	.84000	2119.0	.4300-01	.5100-01	.5690-01	.9220	.2907-02	.2196-02	.5240	3.256	510.3
141	301.50	.85000	2120.0	.4270-01	.5060-01	.5650-01	.9220	.2885-02	.2180-02	.5210	3.242	510.3
141	301.50	.86000	2021.0	.3290-01	.3910-01	.4370-01	.9220	.2231-02	.1683-02	.4010	2.509	511.0
141	301.50	.87000	2122.0	.3620-01	.4300-01	.4790-01	.9220	.2449-02	.1852-02	.4440	2.771	509.6
141	301.50	.88000	2123.0	.3240-01	.3850-01	.4290-01	.9220	.2194-02	.1657-02	.3950	2.481	510.6
141	301.50	.89000	2124.0	.3190-01	.3780-01	.4230-01	.9220	.2159-02	.1631-02	.3890	2.464	510.4
141	301.50	.90000	2125.0	.2390-01	.2840-01	.3170-01	.9220	.1618-02	.1223-02	.2920	1.868	509.9
141	301.50	.92600	2127.0	.5710-01	.6850-01	.7710-01	.9220	.3940-02	.2915-02	.6550	4.150	524.5
141	301.50	.93500	2128.0	.5200-01	.6260-01	.7070-01	.9220	.3615-02	.2658-02	.5870	3.992	528.4
141	305.40	.82000	2113.0	.3610-01	.4280-01	.4770-01	.9220	.2439-02	.1844-02	.4420	2.744	509.6
141	305.40	.83000	2114.0	.3920-01	.4650-01	.5190-01	.9220	.2651-02	.2004-02	.4790	2.977	509.9
141	305.40	.83500	2115.0	.4930-01	.5860-01	.6560-01	.9220	.3350-02	.2521-02	.5950	3.719	513.1
137	305.40	.84000	857.00	.5830-01	.6900-01	.7690-01	.9220	.3928-02	.2978-02	.7200	4.538	508.1
139	305.40	.85000	858.00	.5240-01	.6190-01	.6890-01	.9220	.3525-02	.2678-02	.6530	4.141	507.3
139	305.40	.86000	859.00	.4130-01	.4880-01	.5440-01	.9220	.2780-02	.2113-02	.5160	3.301	506.9
139	305.40	.87000	860.00	.4560-01	.5390-01	.6000-01	.9220	.3066-02	.2334-02	.5730	3.674	505.8
139	305.40	.88000	861.00	.3930-01	.4630-01	.5150-01	.9220	.2634-02	.2010-02	.4970	3.193	503.8
139	305.40	.89000	862.00	.3660-01	.4320-01	.4800-01	.9220	.2455-02	.1871-02	.4610	2.979	504.6
139	305.40	.90000	863.00	.3650-01	.4300-01	.4770-01	.9220	.2441-02	.1867-02	.4660	3.029	501.7
139	305.40	.91000	864.00	.2830-01	.3320-01	.3680-01	.9220	.1881-02	.1445-02	.3650	2.720	498.5
139	305.40	.92600	865.00	.3280-01	.3900-01	.4360-01	.9220	.2227-02	.1677-02	.3980	2.933	513.9
139	309.30	.81000	867.00	.3540-01	.4200-01	.4680-01	.9220	.2391-02	.1812-02	.4380	2.793	509.2
139	309.30	.83000	869.00	.3910-01	.4630-01	.5160-01	.9220	.2639-02	.1999-02	.4830	3.088	509.3
139	315.00	.40000-01	870.00	.4000-02	.4600-02	.4500-02	.9592	.2285-03	.2029-03	.5600-01	.3700	477.4
139	315.00	.50000-01	871.00	.4090	.5051	.4921	.9556	.2516-01	.2091-01	4.130	26.31	553.7
139	315.00	.60000-01	872.00	.3559	.4371	.4327	.9522	.2212-01	.1820-01	3.682	24.42	548.8
137	315.00	.70000-01	873.00	.3123	.3816	.3833	.9490	.1957-01	.1594-01	3.291	22.43	543.4
137	315.00	.10000+00	875.00	.2130	.2566	.2671	.9404	.1364-01	.1088-01	2.400	15.89	529.1
137	315.00	.15000	876.00	.1187	.1420	.1542	.9297	.7875-02	.6059-02	1.384	10.26	521.3
137	315.00	.20000	877.00	.6260-01	.7430-01	.8250-01	.9236	.4211-02	.3197-02	.7610	5.222	511.8
137	315.00	.35000	878.00	.4760-01	.5680-01	.6370-01	.9220	.3251-02	.2430-02	.5630	3.551	518.1
137	315.00	.50000	880.00	.4240-01	.5030-01	.5620-01	.9220	.2869-02	.2165-02	.5160	3.611	511.3
137	315.00	.55000	881.00	.3030-01	.3580-01	.3980-01	.9220	.2034-02	.1546-02	.3770	2.563	506.0
137	315.00	.60000	882.00	.3700-01	.4390-01	.4900-01	.9220	.2504-02	.1890-02	.4510	3.087	511.2
137	315.00	.65000	883.00	.3830-01	.4550-01	.5090-01	.9220	.2598-02	.1956-02	.4630	3.215	513.1

IH72, EXTERNAL TANK W/PROTUBERANCES HU/HREF (RVZT39)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
137	315.00	.70000	884.00	.3990-01	.4740-01	.5290-01	.9220	.2701-02	.2036-02	.4840	3.500	512.2
137	315.00	.75000	885.00	.3200-01	.3790-01	.4220-01	.9220	.2155-02	.1636-02	.3980	2.558	506.7
137	315.00	.80000	886.00	.3880-01	.4590-01	.5120-01	.9220	.2612-02	.1981-02	.4800	3.076	507.7
137	315.00	.84000	887.00	.6250-01	.7410-01	.8280-01	.9220	.4229-02	.3189-02	.7580	4.848	512.1
139	315.00	.85000	888.00	.6990-01	.8310-01	.9300-01	.9220	.4754-02	.3573-02	.8430	5.427	515.3
139	315.00	.87000	890.00	.4420-01	.5230-01	.5820-01	.9220	.2978-02	.2262-02	.5510	3.572	507.6
139	315.00	.88000	891.00	.4200-01	.4960-01	.5530-01	.9220	.2826-02	.2147-02	.5240	3.418	507.1
139	315.00	.89000	892.00	.4290-01	.5070-01	.5640-01	.9220	.2884-02	.2196-02	.5390	3.581	505.6
139	315.00	.90000	893.00	.5090-01	.6000-01	.6670-01	.9220	.3410-02	.2600-02	.6420	4.315	504.4
139	315.00	.91000	894.00	.3480-01	.4090-01	.4530-01	.9220	.2317-02	.1778-02	.4480	3.349	499.1
139	315.00	.92600	895.00	.8020-01	.9550-01	.1069	.9220	.5466-02	.4101-02	.9620	7.105	516.5
139	322.30	.42000	897.00	.4830-01	.5730-01	.6400-01	.9220	.3271-02	.2470-02	.5900	3.863	512.1
139	322.30	.43500	898.00	.4370-01	.5180-01	.5780-01	.9220	.2956-02	.2235-02	.5370	3.417	510.9
139	322.30	.45000	899.00	.4410-01	.5230-01	.5840-01	.9220	.2985-02	.2256-02	.5410	3.602	511.4
139	322.30	.50000	900.00	.4410-01	.5240-01	.5850-01	.9220	.2992-02	.2256-02	.5370	3.642	512.9
139	322.30	.60000	901.00	.3710-01	.4400-01	.4910-01	.9220	.2512-02	.1899-02	.4560	3.087	510.8
139	322.30	.70000	902.00	.3380-01	.4010-01	.4480-01	.9220	.2292-02	.1728-02	.4120	2.860	512.8
139	322.30	.80000	903.00	.2790-01	.3940-01	.5110-01	.9220	.2615-02	.1426-02	.1840	1.125	622.3
141	324.45	.41000	2110.0	.5020-01	.5980-01	.6700-01	.9220	.3425-02	.2564-02	.5960	3.816	516.6
141	324.45	.92600	2164.0	.6890-01	.8250-01	.9280-01	.9220	.4741-02	.3521-02	.8000	5.755	522.1
141	326.85	.40000	2107.0	.5010-01	.5970-01	.6680-01	.9220	.3413-02	.2561-02	.5990	3.839	515.1
141	326.85	.40500	2108.0	.4940-01	.5890-01	.6590-01	.9220	.3368-02	.2526-02	.5900	3.777	515.6
140	326.85	.44000	2021.0	.4870-01	.5800-01	.6480-01	.9220	.3315-02	.2490-02	.5850	3.783	514.7
140	326.85	.54600	2024.0	.2260-01	.2680-01	.2990-01	.9220	.1528-02	.1155-02	.2770	1.892	510.0
140	326.85	.58100	2025.0	.3720-01	.4430-01	.4960-01	.9220	.2536-02	.1900-02	.4430	3.149	516.6
140	326.85	.61600	2026.0	.3580-01	.4270-01	.4780-01	.9220	.2443-02	.1832-02	.4280	3.021	516.2
140	326.85	.65200	2027.0	.3600-01	.4300-01	.4820-01	.9220	.2465-02	.1842-02	.4260	3.005	518.5
140	326.85	.68600	2028.0	.3640-01	.4340-01	.4870-01	.9220	.2490-02	.1860-02	.4300	3.062	518.6
140	326.85	.72260	2029.0	.2670-01	.3180-01	.3550-01	.9220	.1815-02	.1366-02	.3230	2.289	513.5
140	326.85	.75790	2030.0	.1980-01	.2340-01	.2610-01	.9220	.1335-02	.1010-02	.2420	1.579	509.7
140	326.85	.79310	2031.0	.3810-01	.4530-01	.5070-01	.9220	.2594-02	.1945-02	.4550	2.898	515.8
140	326.85	.82830	2032.0	.4110-01	.4900-01	.5480-01	.9220	.2801-02	.2102-02	.4830	3.165	515.4
140	326.85	.86350	2033.0	.4820-01	.5740-01	.6420-01	.9220	.3283-02	.2464-02	.5770	3.675	515.5
140	326.85	.90000	2034.0	.6080-01	.7260-01	.8130-01	.9220	.4158-02	.3110-02	.7220	4.552	517.7
141	326.85	.92600	2163.0	.8020-01	.9620-01	.1083	.9220	.5536-02	.4097-02	.9210	6.624	524.3
140	326.85	.93390	2035.0	.1009	.1223	.1388	.9220	.7093-02	.5156-02	1.104	7.442	535.6
141	330.20	.40000	2104.0	.4990-01	.5930-01	.6630-01	.9220	.3390-02	.2548-02	.5990	3.842	513.9
141	330.20	.40500	2105.0	.5090-01	.6050-01	.6770-01	.9220	.3457-02	.2600-02	.6130	3.927	513.5
141	330.20	.41000	2106.0	.5110-01	.6090-01	.6810-01	.9220	.3482-02	.2612-02	.6110	3.901	515.3
139	330.20	.42000	905.00	.4540-01	.5390-01	.6010-01	.9220	.3074-02	.2323-02	.5570	3.658	511.3
139	330.20	.43500	906.00	.4850-01	.5750-01	.6420-01	.9220	.3285-02	.2478-02	.5920	3.905	512.4
139	330.20	.45000	907.00	.4700-01	.5580-01	.6240-01	.9220	.3189-02	.2403-02	.5710	3.789	513.5
139	330.20	.50000	908.00	.4030-01	.4790-01	.5350-01	.9220	.2735-02	.2062-02	.4910	3.575	512.9

IH72, EXTERNAL TANK W/PROTUBERANCES

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
139	330.20	.60000	909.00	.3990-01	.4730-01	.5290-01	.9220	.2704-02	.2038-02	.4850	3.226	513.3
139	330.20	.70000	910.00	.3810-01	.4530-01	.5060-01	.9220	.2588-02	.1947-02	.4600	3.153	514.8
139	330.20	.80000	911.00	.2750-01	.3270-01	.3660-01	.9220	.1871-02	.1404-02	.3300	2.149	516.1
139	330.20	.87000	912.00	.9000-02	.1090-01	.1220-01	.9220	.6261-03	.4624-03	.1040	.6690	527.1
141	330.20	.92600	2162.0	.9020-01	.1083	.1220	.9220	.6233-02	.4609-02	1.034	7.408	524.8
141	334.98	.92600	2161.0	.1720	.2080	.2356	.9220	.1204-01	.8789-02	1.902	13.53	532.8
139	334.98	.93500	913.00	.1775	.2139	.2416	.9220	.1235-01	.9078-02	2.006	14.71	530.1
139	334.98	.94500	914.00	.2820-01	.3340-01	.3710-01	.9220	.1899-02	.1444-02	.3530	2.598	506.4
139	337.50	.40000-01	915.00	.4313	.5336	.5114	.9592	.2615-01	.2205-01	4.320	27.26	555.2
139	337.50	.50000-01	916.00	.4090	.5044	.4915	.9556	.2513-01	.2091-01	4.154	26.71	552.5
139	337.50	.70000-01	918.00	.2933	.3562	.3578	.9490	.1829-01	.1500-01	3.191	22.28	538.4
139	337.50	.80000-01	919.00	.2720	.3292	.3349	.9460	.1712-01	.1391-01	3.003	20.62	535.1
139	337.50	.10000+00	920.00	.2020	.2420	.2516	.9404	.1286-01	.1033-01	2.343	15.83	524.3
139	337.50	.15000	921.00	.1208	.1438	.1558	.9297	.7968-02	.6179-02	1.452	10.69	516.1
139	337.50	.20000	922.00	.6110-01	.7230-01	.8010-01	.9236	.4094-02	.3124-02	.7570	5.140	508.8
141	337.50	.42000	923.00	.5920-01	.7050-01	.7900-01	.9220	.4041-02	.3026-02	.7060	4.676	517.8
139	337.50	.42500	2167.0	.5520-01	.6580-01	.7370-01	.9220	.3765-02	.2821-02	.6570	4.304	516.2
139	337.50	.43500	924.00	.4720-01	.5610-01	.6270-01	.9220	.3208-02	.2414-02	.5720	3.804	514.3
139	337.50	.85000	926.00	.3550-01	.4200-01	.4680-01	.9220	.2395-02	.1818-02	.4420	2.913	508.2
139	337.50	.86000	927.00	.3810-01	.4500-01	.5010-01	.9220	.2564-02	.1947-02	.4740	3.139	507.6
139	337.50	.87000	928.00	.4270-01	.5050-01	.5620-01	.9220	.2873-02	.2184-02	.5340	3.546	506.6
139	337.50	.88000	929.00	.3420-01	.4020-01	.4460-01	.9220	.2280-02	.1749-02	.4410	2.953	499.3
139	337.50	.89000	930.00	.7390-01	.8750-01	.9760-01	.9220	.4988-02	.3777-02	.9110	6.113	509.8
139	337.50	.90000	931.00	.7640-01	.9050-01	.1008	.9220	.5155-02	.3909-02	.9470	6.512	508.8
139	337.50	.91000	932.00	.9790-01	.1156	.1286	.9220	.6575-02	.5004-02	1.227	9.171	505.9
137	343.12	.41500	934.00	.5200-01	.6170-01	.6890-01	.9220	.3520-02	.2657-02	.6340	4.184	511.4
137	343.12	.42000	935.00	.5510-01	.6560-01	.7330-01	.9220	.3744-02	.2814-02	.6620	4.404	514.5
137	343.12	.42500	936.00	.7840-01	.9410-01	.1060	.9220	.5413-02	.4000-02	.8970	5.948	525.7
137	343.12	.44500	939.00	.6710-01	.8030-01	.9020-01	.9220	.4605-02	.3426-02	.7820	5.263	521.4
137	343.12	.45000	940.00	.6170-01	.7370-01	.8260-01	.9220	.4219-02	.3152-02	.7290	4.913	518.5
137	343.12	.50000	941.00	.4280-01	.5080-01	.5680-01	.9220	.2899-02	.2185-02	.5190	3.581	512.4
137	343.12	.60000	942.00	.5040-01	.6000-01	.6720-01	.9220	.3432-02	.2572-02	.6000	3.929	516.5
137	343.12	.80000	944.00	.4500-01	.5350-01	.5990-01	.9220	.3057-02	.2298-02	.5410	3.592	514.2
141	345.56	.42500	2168.0	.7820-01	.9430-01	.1065	.9220	.5441-02	.3998-02	.8810	5.732	528.8
141	345.56	.92600	2160.0	.2549	.3089	.3505	.9220	.1791-01	.1302-01	2.790	19.83	534.9
137	348.00	.35000	945.00	.4630-01	.5490-01	.6130-01	.9220	.3129-02	.2362-02	.5630	3.634	511.4
137	348.00	.36000	946.00	.4510-01	.5350-01	.5970-01	.9220	.3050-02	.2303-02	.5500	3.558	511.1
137	348.00	.37000	947.00	.4440-01	.5270-01	.5880-01	.9220	.3001-02	.2269-02	.5440	3.533	510.1
139	348.00	.37500	948.00	.4480-01	.5310-01	.5930-01	.9220	.3031-02	.2289-02	.5480	3.555	511.8
139	348.00	.38000	949.00	.4420-01	.5240-01	.5850-01	.9220	.2993-02	.2260-02	.5410	3.539	511.9
139	348.00	.38500	950.00	.4380-01	.5190-01	.5800-01	.9220	.2964-02	.2238-02	.5350	3.511	512.1
139	348.00	.39000	951.00	.4440-01	.5270-01	.5990-01	.9220	.3010-02	.2272-02	.5430	3.583	512.2
139	348.00	.39500	952.00	.4590-01	.5440-01	.6080-01	.9220	.3109-02	.2345-02	.5590	3.638	512.7

IH72, EXTERNAL TANK W/PROTUBERANCES HU/HREF (RVZT39)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
139	348.00	.40000	953.00	.4460-01	.5300-01	.5920-01	.9220	.3025-02	.2283-02	.5450	3.608	512.4
139	348.00	.41000	955.00	.4570-01	.5440-01	.6080-01	.9220	.3106-02	.2339-02	.5550	3.679	514.0
139	348.00	.41500	956.00	.4980-01	.5920-01	.6620-01	.9220	.3383-02	.2544-02	.6010	3.998	514.8
139	348.00	.42000	957.00	.5890-01	.7020-01	.7860-01	.9220	.4020-02	.3014-02	.7050	4.700	517.1
139	348.00	.42500	958.00	.6700-01	.8020-01	.9010-01	.9220	.4608-02	.3424-02	.7810	5.185	523.1
139	348.00	.43000	959.00	.8720-01	.1055	.1196	.9220	.6115-02	.4458-02	.9640	6.348	534.8
139	348.00	.44000	960.00	.8900-01	.1073	.1212	.9220	.6196-02	.4550-02	1.003	6.637	530.6
139	348.00	.44500	961.00	.7620-01	.9120-01	.1024	.9220	.5239-02	.3898-02	.8920	5.930	522.2
139	348.00	.85000	968.00	.4480-01	.5310-01	.5920-01	.9220	.3028-02	.2293-02	.5540	3.660	509.7
139	348.00	.86000	969.00	.4100-01	.4850-01	.5400-01	.9220	.2764-02	.2094-02	.5070	3.359	509.2
140	348.00	.89000	972.00	.9840-01	.1173	.1314	.9220	.6717-02	.5031 02	1.172	7.905	516.8
140	348.00	.90000	973.00	.1025	.1220	.1366	.9220	.6981-02	.5240-02	1.228	8.492	515.4
140	348.00	.91000	974.00	.1126	.1338	.1495	.9220	.7644-02	.5753-02	1.360	10.09	513.4
141	352.20	.93700	2089.0	.2830-01	.3500-01	.4040-01	.9220	.2063-02	.1448-02	.2840	1.979	553.1
141	354.00	.42500	2169.0	.1560-01	.1890-01	.2130-01	.9220	.1091-02	.7976-03	.1730	1.127	531.7
141	354.00	.43000	2174.0	.8080-01	.9730-01	.1099	.9220	.5616-02	.4127-02	.9090	5.917	528.8
141	354.00	.43500	2177.0	.9000-01	.1084	.1225	.9220	.6261-02	.4597-02	1.011	6.577	529.3
141	354.00	.44000	2179.0	.8900-01	.1074	.1214	.9220	.6205-02	.4548-02	.9950	6.472	530.3
141	355.16	.92600	2158.0	.2647	.3257	.3741	.9220	.1911-01	.1352-01	2.702	19.37	549.3

EXTERNAL TANK

PARAMETRIC DATA

ALPHA = -5.000 BETA = -9.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
303	-5.040	-9.000	3.010	36.80	702.0	249.8	.9870	6.258	2331.	.3314-03	.1999-06	3.866
304	-5.030	-9.000	3.010	36.80	703.0	250.0	.9860	6.252	2332.	.3309-03	.2000-06	3.858
305	-5.000	-9.000	3.010	36.90	703.0	250.1	.9890	6.271	2332.	.3317-03	.2001-06	3.867
312	-5.000	-9.000	3.010	37.10	705.0	250.6	.9950	6.312	2335.	.3332-03	.2005-06	3.880
313	-5.010	-9.000	3.010	37.00	705.0	250.6	.9930	6.300	2335.	.3326-03	.2004-06	3.874
314	-5.040	-9.000	3.010	37.10	705.0	250.6	.9950	6.308	2335.	.3330-03	.2005-06	3.879

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
303	.5518-01	.9225-02
304	.5516-01	.9234-02
305	.5525-01	.9223-02
312	.5544-01	.9206-02
313	.5539-01	.9213-02
314	.5542-01	.9207-02

TEST DATA

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
304	.00000	.25000-01	2187.0	.5730	.7522	.6345	.9797	.3499-01	.3160-01	4.663	32.79	555.4
303	.00000	.40000-01	600.00	.4184	.5322	.4670	.9757	.2577-01	.2309-01	3.791	24.48	538.2
303	.00000	.50000-01	601.00	.4250	.5400	.4824	.9720	.2662-01	.2345-01	3.865	25.04	537.6
303	.00000	.70000-01	603.00	.3547	.4493	.4155	.9652	.2293-01	.1957-01	3.263	22.39	535.7
303	.00000	.80000-01	604.00	.3525	.4465	.4194	.9621	.2314-01	.1945-01	3.247	21.24	535.5
303	.00000	.15000	606.00	.1847	.2307	.2368	.9449	.1306-01	.1019-01	1.795	13.18	526.4
303	.00000	.20000	607.00	.1193	.1486	.1581	.9377	.8723-02	.6585-02	1.175	7.755	524.0
303	.00000	.21000	608.00	.1051	.1341	.1446	.9368	.7980-02	.5796-02	.9400	6.518	540.2
303	.00000	.22000	609.00	.9110-01	.1160	.1255	.9361	.6927-02	.5026-02	.8220	6.144	538.8
303	.00000	.30000	610.00	.7830-01	.9920-01	.1078	.9350	.5948-02	.4322-02	.7220	4.971	535.4
303	.00000	.36000	612.00	.7440-01	.9350-01	.1013	.9350	.5589-02	.4103-02	.7050	4.776	530.6
303	.00000	.37500	614.00	.7620-01	.9580-01	.1038	.9350	.5728-02	.4202-02	.7200	4.880	531.0

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT40)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
305	00000	.38000	615.00	.7730-01	.9690-01	.1049	.9350	.5793-02	.4272-02	.7440	5.042	529.2
305	00000	.38500	616.00	.7820-01	.9800-01	.1061	.9350	.5862-02	.4322-02	.7520	5.101	529.2
305	.00000	.39000	617.00	.1900-02	.2400-02	.2600-02	.9350	.1417-03	.1050-03	.1900-01	.1260	526.6
305	.00000	.39500	618.00	.7560-01	.9480-01	.1027	.9350	.5672-02	.4178-02	.7250	4.931	529.7
305	.00000	.40000	619.00	.7750-01	.9720-01	.1052	.9350	.5814-02	.4279-02	.7410	5.009	530.1
305	.00000	.40500	620.00	.7950-01	.9890-01	.1067	.9350	.5895-02	.4391-02	.7870	5.348	524.1
305	.00000	.41000	621.00	.8130-01	.1013	.1093	.9350	.6041-02	.4489-02	.7990	5.430	525.3
305	.00000	.41500	622.00	.8340-01	.1041	.1124	.9350	.6212-02	.4608-02	.8160	5.524	526.2
305	.00000	.43000	625.00	.7880-01	.9810-01	.1059	.9350	.5851-02	.4352-02	.7760	5.276	524.8
305	.00000	.44000	626.00	.7600-01	.9460-01	.1021	.9350	.5641-02	.4200-02	.7510	5.106	524.4
305	.00000	.44500	627.00	.7570-01	.9430-01	.1018	.9350	.5622-02	.4181-02	.7460	5.114	524.9
305	.00000	.45000	628.00	.7420-01	.9230-01	.9970-01	.9350	.5506-02	.4097-02	.7320	5.022	524.6
305	.00000	.45500	629.00	.7380-01	.9200-01	.9930-01	.9350	.5485-02	.4077-02	.7260	5.056	525.2
303	.00000	.46000	630.00	.7250-01	.9140-01	.9920-01	.9350	.5473-02	.4001-02	.6790	4.599	532.6
303	.00000	.47000	631.00	.7300-01	.9200-01	.9990-01	.9350	.5510-02	.4027-02	.6830	4.621	532.9
303	.00000	.48000	632.00	.7320-01	.9260-01	.1006	.9350	.5549-02	.4038-02	.6770	4.607	534.7
303	.00000	.49000	633.00	.7260-01	.9160-01	.9930-01	.9350	.5481-02	.4006-02	.6800	4.673	532.7
303	.00000	.50000	634.00	.6420-01	.8070-01	.8740-01	.9350	.4825-02	.3540-02	.6070	4.280	531.0
303	.00000	.55000	635.00	.5850-01	.7340-01	.7940-01	.9350	.4383-02	.3225-02	.5570	3.734	529.6
303	.00000	.60000	636.00	.7660-01	.9680-01	.1051	.9350	.5797-02	.4228-02	.7130	4.628	533.8
303	.00000	.65000	637.00	.7980-01	.1008	.1094	.9350	.6036-02	.4406-02	.7450	4.850	533.4
303	.00000	.70000	638.00	.7640-01	.9640-01	.1046	.9350	.5774-02	.4215-02	.7130	4.915	533.3
303	.00000	.75000	639.00	.5780-01	.7250-01	.7850-01	.9350	.4330-02	.3191-02	.5540	3.602	528.9
303	.00000	.80000	640.00	.6970-01	.8770-01	.9510-01	.9350	.5247-02	.3844-02	.6570	4.147	531.6
303	.00000	.85000	641.00	.7060-01	.8890-01	.9640-01	.9350	.5318-02	.3897-02	.6660	4.244	531.5
303	.00000	.87000	643.00	.7310-01	.9210-01	.9990-01	.9350	.5511-02	.4035-02	.6880	4.467	532.0
303	.00000	.88000	644.00	.7180-01	.9050-01	.9810-01	.9350	.5412-02	.3963-02	.6760	4.430	531.9
305	.00000	.89000	645.00	.7220-01	.9090-01	.9850-01	.9350	.5443-02	.3990-02	.6830	4.531	532.0
305	.00000	.92600	648.00	.4320-01	.5400-01	.5830-01	.9350	.3222-02	.2387-02	.4210	3.100	526.9
305	.00000	.95000	649.00	.1720-01	.2130-01	.2300-01	.9350	.1270-02	.9490-03	.1720	1.267	522.5
314	5.6250	.42500	2170.0	.7630-01	.9530-01	.1030	.9348	.5711-02	.4229-02	.7480	4.915	527.7
314	5.6250	.43500	2178.0	.7100-01	.8850-01	.9570-01	.9348	.5303-02	.3933-02	.6990	4.593	526.9
305	11.250	.35000	650.00	.7330-01	.9180-01	.9950-01	.9347	.5499-02	.4051-02	.7070	4.796	528.7
305	11.250	.36000	651.00	.6100-02	.7700-02	.8300-02	.9347	.4599-03	.3387-03	.5900-01	.4020	528.9
305	11.250	.37000	652.00	.7400-01	.9260-01	.1004	.9347	.5546-02	.4086-02	.7130	4.837	528.7
305	11.250	.37500	653.00	.4000-02	.5000-02	.5400-02	.9347	.3007-03	.2214-03	.3900-01	.2620	529.1
305	11.250	.38000	654.00	.6840-01	.8550-01	.9260-01	.9347	.5115-02	.3776-02	.6630	4.513	527.7
305	11.250	.38500	655.00	.1900-02	.2400-02	.2600-02	.9347	.1458-03	.1070-03	.1800-01	.1260	530.5
305	11.250	.39500	657.00	.6950-01	.8690-01	.9420-01	.9347	.5204-02	.3838-02	.6720	4.571	528.2
305	11.250	.40500	659.00	.6960-01	.8720-01	.9450-01	.9347	.5221-02	.3845-02	.6700	4.572	529.0
305	11.250	.41000	660.00	.6950-01	.8710-01	.9440-01	.9347	.5215-02	.3841-02	.6690	4.553	529.0
305	11.250	.41500	661.00	.6790-01	.8490-01	.9200-01	.9347	.5081-02	.3750-02	.6570	4.461	527.9
305	11.250	.42000	662.00	.6940-01	.8700-01	.9430-01	.9347	.5211-02	.3832-02	.6650	4.525	529.6

IH72, EXTERNAL TANK CLEAN,

HU/HREF

(RVZT40)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
305	11.250	.42500	663.00	.6830-01	.8570-01	.9290-01	.9347	.5130-02	.3775-02	.6560	4.477	529.4
305	11.250	.43000	664.00	.6380-01	.7970-01	.8640-01	.9347	.4771-02	.3522-02	.6180	4.262	527.7
305	11.250	.44000	665.00	.5920-01	.7420-01	.8040-01	.9347	.4441-02	.3270-02	.5690	3.897	529.1
305	11.250	.45000	666.00	.6460-01	.8090-01	.8760-01	.9347	.4842-02	.3570-02	.6240	4.272	528.5
305	11.250	.45500	667.00	.6130-01	.7690-01	.8340-01	.9347	.4605-02	.3385-02	.5870	4.014	529.9
305	11.250	.46000	668.00	.6280-01	.7870-01	.8530-01	.9347	.4715-02	.3470-02	.6030	4.142	529.3
305	11.250	.47000	669.00	.6040-01	.7590-01	.8230-01	.9347	.4548-02	.3336-02	.5750	3.954	531.0
305	11.250	.48000	670.00	.6570-01	.8260-01	.8970-01	.9347	.4955-02	.3632-02	.6250	4.297	531.2
305	11.250	.49000	671.00	.6350-01	.7980-01	.8660-01	.9347	.4785-02	.3508-02	.6040	4.139	531.2
305	11.250	.50000	672.00	.5870-01	.7360-01	.7990-01	.9347	.4413-02	.3240-02	.5600	3.928	530.3
305	11.250	.70000	674.00	.6100-01	.7660-01	.8310-01	.9347	.4590-02	.3367-02	.5810	3.983	530.8
305	11.250	.80000	675.00	.4000-02	.5100-02	.5500-02	.9347	.3028-03	.2222-03	.3800-01	.2390	530.8
305	11.250	.85000	676.00	.5620-01	.7060-01	.7650-01	.9347	.4229-02	.3105-02	.5370	3.440	530.4
305	11.250	.86000	677.00	.5660-01	.7120-01	.7720-01	.9347	.4266-02	.3128-02	.5380	3.468	531.2
305	11.250	.87000	678.00	.5870-01	.7380-01	.8010-01	.9347	.4427-02	.3243-02	.5570	3.621	531.5
305	11.250	.88000	679.00	.5910-01	.7440-01	.8080-01	.9347	.4462-02	.3264-02	.5580	3.670	532.2
305	11.250	.90000	681.00	.4840-01	.6050-01	.6560-01	.9347	.3623-02	.2673-02	.4680	3.186	528.1
305	11.250	.91000	682.00	.2280-01	.2830-01	.3050-01	.9347	.1684-02	.1261-02	.2300	1.703	520.5
305	11.250	.92600	683.00	.3190-01	.3990-01	.4320-01	.9347	.2384-02	.1763-02	.3110	2.297	527.0
305	11.250	.95000	684.00	.2240-01	.2780-01	.3010-01	.9347	.1662-02	.1237-02	.2220	1.622	523.8
305	17.000	.33000	685.00	.7040-01	.8820-01	.9570-01	.9346	.5285-02	.3889-02	.6770	4.594	529.1
305	17.000	.34000	686.00	.6870-01	.8600-01	.9320-01	.9346	.5149-02	.3795-02	.6640	4.504	528.3
305	17.000	.35000	687.00	.6660-01	.8320-01	.9010-01	.9346	.4979-02	.3678-02	.6480	4.396	527.2
314	17.000	.35500	2102.0	.6940-01	.8620-01	.9310-01	.9346	.5160-02	.3847-02	.6970	4.617	523.4
305	17.000	.36000	688.00	.6710-01	.8380-01	.9070-01	.9346	.5011-02	.3706-02	.6550	4.448	526.5
305	17.000	.37000	689.00	.6550-01	.8180-01	.8870-01	.9346	.4898-02	.3617-02	.6360	4.318	527.4
305	17.000	.37500	690.00	.6530-01	.8160-01	.8830-01	.9346	.4881-02	.3607-02	.6360	4.332	526.9
314	17.000	.42500	2171.0	.6480-01	.8060-01	.8710-01	.9346	.4828-02	.3593-02	.6480	4.201	524.4
314	17.000	.43000	2176.0	.6240-01	.7740-01	.8370-01	.9346	.4638-02	.3457-02	.6260	4.120	523.6
303	17.000	.50000	691.00	.6250-01	.7770-01	.8410-01	.9346	.4638-02	.3448-02	.6170	4.199	523.4
303	17.000	.60000	692.00	.5710-01	.7120-01	.7700-01	.9346	.4250-02	.3149-02	.5590	3.642	525.0
303	17.000	.70000	693.00	.5170-01	.6460-01	.7010-01	.9346	.3867-02	.2850-02	.4980	3.412	527.6
303	17.000	.80000	694.00	.4700-01	.5890-01	.6390-01	.9346	.3525-02	.2594-02	.4510	2.863	528.4
303	17.000	.92600	696.00	.2650-01	.3310-01	.3580-01	.9346	.1975-02	.1462-02	.2580	1.912	525.6
314	20.980	.35500	2098.0	.5140-01	.6360-01	.6860-01	.9345	.3800-02	.2850-02	.5260	3.539	520.2
314	20.980	.36000	2099.0	.6050-01	.7490-01	.8090-01	.9345	.4481-02	.3356-02	.6160	4.111	521.0
314	20.980	.36500	2100.0	.5840-01	.7220-01	.7790-01	.9345	.4317-02	.3239-02	.5990	3.996	519.8
314	23.070	.36000	2095.0	.5760-01	.7120-01	.7690-01	.9345	.4259-02	.3191-02	.5870	3.914	520.7
314	23.070	.36500	2096.0	.5650-01	.6990-01	.7540-01	.9345	.4177-02	.3132-02	.5780	3.854	520.2
313	23.070	.43500	2000.0	.6080-01	.7620-01	.8270-01	.9345	.4578-02	.3366-02	.5860	3.790	530.4
313	23.070	.56890	2001.0	.4640-01	.5830-01	.6340-01	.9345	.3511-02	.2569-02	.4420	3.046	532.6
313	23.070	.70270	2002.0	.4340-01	.5460-01	.5930-01	.9345	.3286-02	.2405-02	.4130	2.970	532.6
313	23.070	.83500	2003.0	.4300-01	.5400-01	.5870-01	.9345	.3251-02	.2383-02	.4120	2.637	531.8

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT40)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
313	23.070	.90000	2004.0	.4080-01	.5140-01	.5580-01	.9345	.3091-02	.2262-02	.3890	2.635	532.6
314	23.070	.92600	2154.0	.1940-01	.2410-01	.2610-01	.9345	.1445-02	.1077-02	.1950	1.407	523.6
303	29.800	.70000-01	700.00	.3062	.3842	.3708	.9571	.2046-01	.1690-01	2.925	19.95	529.3
303	29.800	.10000+00	701.00	.2426	.3025	.3036	.9493	.1675-01	.1338-01	2.373	15.29	525.2
303	29.800	.15000	702.00	.1461	.1811	.1900	.9401	.1049-01	.8063-02	1.467	10.64	520.5
303	29.800	.20000	703.00	.8820-01	.1087	.1166	.9355	.6433-02	.4865-02	.9050	6.120	516.5
303	29.800	.30000	704.00	.5330-01	.6680-01	.7250-01	.9345	.4002-02	.2939-02	.5090	3.639	529.2
303	29.800	.35000	705.00	.5290-01	.6600-01	.7150-01	.9345	.3947-02	.2919-02	.5160	3.570	525.7
314	29.800	.35500	2090.0	.5130-01	.6360-01	.6860-01	.9345	.3803-02	.2846-02	.5220	3.480	521.3
314	29.800	.36500	2092.0	.5440-01	.6730-01	.7250-01	.9345	.4021-02	.3017-02	.5580	3.710	519.8
314	29.800	.37000	2093.0	.4850-01	.5970-01	.6430-01	.9345	.3565-02	.2689-02	.5050	3.377	516.8
305	29.800	.37500	706.00	.1500-02	.1900-02	.2000-02	.9345	.1117-03	.8213-04	.1400-01	.9900-01	529.1
305	29.800	.50000	707.00	.4720-01	.5890-01	.6380-01	.9345	.3527-02	.2608-02	.4610	3.188	526.5
305	29.800	.60000	708.00	.4470-01	.5570-01	.6030-01	.9345	.3333-02	.2469-02	.4380	2.825	525.7
305	29.800	.70000	709.00	.4410-01	.5500-01	.5950-01	.9345	.3289-02	.2434-02	.4310	2.777	526.1
305	29.800	.80000	710.00	.4080-01	.5090-01	.5520-01	.9345	.3048-02	.2254-02	.3980	2.508	526.5
305	29.800	.87000	711.00	.1400-02	.1800-02	.2000-02	.9345	.1132-03	.7764-04	.1100-01	.7200-01	556.6
314	31.430	.44000	2166.0	.4900-01	.6060-01	.6540-01	.9345	.3623-02	.2713-02	.4990	3.355	520.9
313	31.430	.47600	2005.0	.4710-01	.5900-01	.6390-01	.9345	.3542-02	.2609-02	.4570	3.061	529.4
313	31.430	.51100	2006.0	.3930-01	.4930-01	.5350-01	.9345	.2964-02	.2176-02	.3780	2.606	531.0
313	31.430	.54600	2007.0	.1980-01	.2460-01	.2660-01	.9345	.1471-02	.1099-02	.2010	1.426	522.0
313	31.430	.61600	2009.0	.3800-01	.4740-01	.5140-01	.9345	.2845-02	.2103-02	.3720	2.574	527.5
313	31.430	.65000	2010.0	.3760-01	.4700-01	.5090-01	.9345	.2818-02	.2082-02	.3680	2.583	527.9
313	31.430	.68600	2014.0	.3430-01	.4300-01	.4660-01	.9345	.2584-02	.1901-02	.3320	2.333	530.1
313	31.430	.72050	2015.0	.1870-01	.2330-01	.2520-01	.9345	.1396-02	.1037-02	.1860	1.397	525.0
313	31.430	.75570	2016.0	.1000-03	.1000-03	.1000-03	.9345	.6252-05	.4596-05	.1000-02	.5000-02	530.4
313	31.430	.79040	2017.0	.3300-01	.4140-01	.4500-01	.9345	.2490-02	.1830-02	.3190	2.032	530.4
313	31.430	.86000	2019.0	.5000-02	.6300-02	.6900-02	.9345	.3802-03	.2789-03	.4800-01	.3140	531.5
313	31.430	.89520	2020.0	.3520-01	.4420-01	.4800-01	.9345	.2658-02	.1948-02	.3360	2.205	531.9
314	31.430	.92600	2153.0	.1070-01	.1320-01	.1430-01	.9345	.7919-03	.5927-03	.1090	.8040	521.2
313	33.750	.25000	2079.0	.4310-01	.5430-01	.5910-01	.9345	.3274-02	.2385-02	.4060	3.351	534.6
313	33.750	.30000	2080.0	.5770-01	.7280-01	.7920-01	.9345	.4389-02	.3193-02	.5410	3.581	535.2
313	33.750	.37500	2081.0	.4960-01	.6160-01	.6670-01	.9345	.3693-02	.2746-02	.4940	3.318	524.7
313	33.750	.40000	2082.0	.4780-01	.5960-01	.6460-01	.9345	.3577-02	.2650-02	.4720	3.167	526.5
313	33.750	.43000	2083.0	.4960-01	.6190-01	.6700-01	.9345	.3710-02	.2748-02	.4890	3.281	526.6
313	33.750	.45000	2084.0	.4430-01	.5530-01	.6000-01	.9345	.3321-02	.2454-02	.4340	2.910	527.8
313	33.750	.60000	2085.0	.4220-01	.5290-01	.5730-01	.9345	.3175-02	.2339-02	.4100	2.747	529.3
314	33.750	.65000	2086.0	.3820-01	.4730-01	.5110-01	.9345	.2829-02	.2117-02	.3880	2.633	521.4
314	33.750	.92600	2152.0	.6800-02	.8400-02	.9100-02	.9345	.5016-03	.3759-03	.6900-01	.5120	520.5
313	36.320	.25000	2066.0	.4850-01	.6040-01	.6540-01	.9345	.3623-02	.2684-02	.4780	3.206	526.6
313	36.320	.35000	2069.0	.5250-01	.6560-01	.7110-01	.9345	.3936-02	.2909-02	.5150	3.452	527.6
313	36.320	.37500	2070.0	.4800-01	.5970-01	.6460-01	.9345	.3576-02	.2658-02	.4780	3.210	524.8
313	36.320	.40000	2071.0	.4640-01	.5770-01	.6240-01	.9345	.3458-02	.2570-02	.4620	3.102	524.9

IH72. EXTERNAL TANK CLEAN. HU/HREF (RVZT40)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
313	36.320	.42000	2072.0	.4860-01	.6060-01	.6570-01	.9345	.3636-02	.2692-02	.4790	3.211	526.8
313	36.320	.42500	2073.0	.4920-01	.6140-01	.6650-01	.9345	.3682-02	.2725-02	.4840	3.248	526.9
313	36.320	.43500	2075.0	.4730-01	.5900-01	.6390-01	.9345	.3539-02	.2619-02	.4650	3.118	527.1
313	36.320	.45000	2076.0	.4800-01	.5870-01	.6310-01	.9345	.3492-02	.2661-02	.5160	3.492	510.6
313	36.320	.60000	2077.0	.3700-01	.4620-01	.5000-01	.9345	.2769-02	.2049-02	.3640	2.464	527.0
313	36.320	.65000	2078.0	.3570-01	.4460-01	.4830-01	.9345	.2676-02	.1977-02	.3490	2.413	528.0
305	37.700	.50000-01	715.00	.3530	.4450	.4206	.9611	.2324-01	.1950-01	3.315	21.78	533.2
305	37.700	.70000-01	716.00	.2883	.3612	.3521	.9551	.1945-01	.1593-01	2.777	19.13	528.9
305	37.700	.10000+00	717.00	.2341	.2901	.2934	.9476	.1621-01	.1293-01	2.358	15.49	521.0
305	37.700	.15000	718.00	.1392	.1718	.1810	.9391	.1000-01	.7690-02	1.425	10.59	517.9
305	37.700	.20000	719.00	.7890-01	.9690-01	.1040	.9351	.5746-02	.4360-02	.8260	5.660	513.9
305	37.700	.30000	720.00	.5180-01	.6480-01	.7030-01	.9345	.3885-02	.2859-02	.4990	3.600	528.8
303	37.700	.35000	721.00	.5500-01	.6850-01	.7410-01	.9345	.4088-02	.3036-02	.5430	3.806	523.7
303	37.700	.37500	722.00	.4770-01	.5920-01	.6400-01	.9345	.3531-02	.2633-02	.4760	3.343	521.6
303	37.700	.50000	723.00	.4610-01	.5700-01	.6150-01	.9345	.3396-02	.2545-02	.4670	3.275	518.8
303	37.700	.60000	724.00	.3880-01	.4820-01	.5210-01	.9345	.2876-02	.2143-02	.3870	2.503	522.0
303	37.700	.70000	725.00	.3830-01	.4770-01	.5170-01	.9345	.2851-02	.2114-02	.3760	2.419	524.4
303	37.700	.80000	726.00	.3370-01	.4210-01	.4560-01	.9345	.2518-02	.1862-02	.3290	2.088	525.9
303	37.700	.87000	727.00	.3050-01	.3810-01	.4140-01	.9345	.2282-02	.1680-02	.2930	1.892	528.0
303	37.700	.92600	728.00	.5100-02	.6300-02	.6900-02	.9345	.3782-03	.2813-03	.5000-01	.3720	522.9
304	39.000	.10000-01	993.00	.5853	.7751	.6911	.9687	.3812-01	.3228-01	4.633	33.47	559.4
304	39.000	.25000-01	994.00	.4490	.5752	.5230	.9678	.2885-01	.2476-01	3.966	27.04	542.8
313	45.000	.25000	2036.0	.3190-01	.4010-01	.4360-01	.9345	.2417-02	.1765-02	.3020	2.460	533.5
313	45.000	.32500	2038.0	.5080-01	.6360-01	.6900-01	.9345	.3823-02	.2812-02	.4910	3.389	530.0
313	45.000	.35000	2039.0	.5060-01	.6310-01	.6830-01	.9345	.3784-02	.2801-02	.4970	3.385	527.1
313	45.000	.37500	2040.0	.4790-01	.5960-01	.6450-01	.9345	.3573-02	.2653-02	.4760	3.241	525.4
313	45.000	.40000	2041.0	.4630-01	.5760-01	.6240-01	.9345	.3455-02	.2564-02	.4590	3.130	525.5
313	45.000	.43000	2044.0	.4250-01	.5280-01	.5720-01	.9345	.3166-02	.2352-02	.4220	2.878	525.1
313	45.000	.43500	2045.0	.4200-01	.5230-01	.5660-01	.9345	.3133-02	.2325-02	.4160	2.835	525.6
313	45.000	.44000	2046.0	.4110-01	.5110-01	.5530-01	.9345	.3061-02	.2274-02	.4080	2.782	525.1
313	45.000	.45000	2047.0	.4120-01	.5140-01	.5560-01	.9345	.3079-02	.2284-02	.4080	2.797	525.9
313	45.000	.47000	2048.0	.4000-01	.5000-01	.5410-01	.9345	.2999-02	.2215-02	.3910	2.703	528.0
313	45.000	.55000	2049.0	.2120-01	.2640-01	.2850-01	.9345	.1581-02	.1175-02	.2110	1.465	525.0
313	45.000	.60000	2050.0	.3290-01	.4110-01	.4460-01	.9345	.2468-02	.1825-02	.3230	2.200	527.5
313	45.000	.65000	2051.0	.3320-01	.4140-01	.4490-01	.9345	.2487-02	.1837-02	.3240	2.182	528.0
313	45.000	.75000	2052.0	.1120-01	.1400-01	.1520-01	.9345	.8402-03	.6220-03	.1110	.7100	526.9
313	45.000	.80000	2053.0	.3070-01	.3840-01	.4170-01	.9345	.2308-02	.1699-02	.2970	1.884	529.7
313	45.000	.83000	2054.0	.2760-01	.3460-01	.3760-01	.9345	.2082-02	.1527-02	.2640	1.671	531.4
313	45.000	.84000	2055.0	.3280-01	.4110-01	.4460-01	.9345	.2473-02	.1816-02	.3150	1.992	530.9
313	45.000	.85000	2056.0	.3270-01	.4100-01	.4450-01	.9345	.2464-02	.1810-02	.3150	2.016	530.8
313	45.000	.86000	2057.0	.3170-01	.3970-01	.4310-01	.9345	.2386-02	.1755-02	.3060	2.009	530.1
313	45.000	.87000	2058.0	.3150-01	.3940-01	.4280-01	.9345	.2370-02	.1742-02	.3040	2.039	530.4
313	45.000	.89000	2060.0	.3210-01	.4040-01	.4380-01	.9345	.2428-02	.1779-02	.3070	2.065	532.1

IH72. EXTERNAL TANK CLEAN. HU/HREF (RVZT40)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
313	45.000	.90000	2061.0	.1450-01	.1810-01	.1960-01	.9345	.1085-02	.8054-03	.1440	.9770	525.5
313	45.000	.91000	2062.0	.3570-01	.4500-01	.4900-01	.9345	.2716-02	.1976-02	.3350	2.757	535.1
313	45.000	.92600	2063.0	.9200-02	.1160-01	.1260-01	.9345	.6955-03	.5117-03	.8900-01	.6370	530.0
313	45.000	.93500	2064.0	.2230-01	.2810-01	.3060-01	.9345	.1694-02	.1234-02	.2090	1.573	534.8
313	45.000	.94500	2065.0	.2290-01	.2860-01	.3100-01	.9345	.1716-02	.1266-02	.2230	1.493	528.6
303	180.00	.15000-01	2182.0	.5963	.8173	.7417	.9638	.4092-01	.3290-01	4.274	31.71	572.5
303	180.00	.20000-01	2183.0	.4947	.6444	.5980	.9628	.3299-01	.2729-01	4.126	31.26	551.2
303	180.00	.25000-01	2184.0	.4515	.5755	.5376	.9628	.2967-01	.2491-01	4.060	29.72	539.5
303	180.00	.30000-01	2185.0	.4471	.5740	.5355	.9627	.2955-01	.2467-01	3.919	28.44	543.6
303	180.00	.40000-01	737.00	.1499	.1804	.1739	.9593	.9594-02	.8273-02	1.719	11.52	494.6
303	180.00	.45000-01	738.00	.3583	.4507	.4335	.9577	.2392-01	.1977-01	3.389	22.62	531.0
303	180.00	.60000-01	739.00	.2958	.3699	.3639	.9533	.2008-01	.1632-01	2.860	19.41	527.2
303	180.00	.70000-01	740.00	.2652	.3315	.3305	.9506	.1824-01	.1464-01	2.570	17.56	526.8
303	180.00	.80000-01	741.00	.2290	.2852	.2877	.9482	.1588-01	.1264-01	2.251	16.56	524.3
303	180.00	.10000+00	742.00	.1946	.2413	.2485	.9440	.1371-01	.1074-01	1.949	13.20	520.9
303	180.00	.12500	743.00	.1581	.1959	.2058	.9399	.1136-01	.8725-02	1.588	11.70	520.4
303	180.00	.15000	744.00	.1267	.1564	.1664	.9371	.9183-02	.6994-02	1.297	9.156	517.0
303	180.00	.17500	745.00	.8660-01	.1064	.1141	.9353	.6295-02	.4781-02	.9030	6.905	513.5
303	180.00	.20000	746.00	.6720-01	.8230-01	.8840-01	.9346	.4880-02	.3706-02	.7080	5.156	511.4
303	180.00	.21500	747.00	.5670-01	.7060-01	.7630-01	.9345	.4213-02	.3130-02	.5610	3.932	523.3
303	180.00	.23000	748.00	.4450-01	.5550-01	.6010-01	.9345	.3314-02	.2456-02	.4370	3.263	524.7
303	180.00	.24000	749.00	.3640-01	.4550-01	.4940-01	.9345	.2724-02	.2011-02	.3530	2.692	526.7
303	180.00	.25000	750.00	.1900-01	.2360-01	.2550-01	.9345	.1407-02	.1047-02	.1880	1.541	522.7
303	180.00	.35000	752.00	.4540-01	.5620-01	.6060-01	.9345	.3345-02	.2505-02	.4590	2.941	519.3
303	180.00	.40000	753.00	.4390-01	.5430-01	.5860-01	.9345	.3233-02	.2425-02	.4460	2.911	518.4
303	180.00	.50000	754.00	.3740-01	.4610-01	.4970-01	.9345	.2745-02	.2063-02	.3820	2.539	517.2
303	180.00	.60000	755.00	.3240-01	.4030-01	.4360-01	.9345	.2405-02	.1789-02	.3210	2.086	522.8
303	180.00	.70000	756.00	.3150-01	.3910-01	.4230-01	.9345	.2334-02	.1738-02	.3130	2.095	522.2
303	180.00	.80000	757.00	.2600-01	.3250-01	.3520-01	.9345	.1941-02	.1436-02	.2540	1.612	525.3
303	180.00	.90000	758.00	.9200-02	.1140-01	.1230-01	.9345	.6787-03	.5104-03	.9500-01	.6220	517.0
303	235.00	.22000	759.00	.8500-01	.1077	.1165	.9359	.6427-02	.4692-02	.7830	5.859	535.6
303	235.00	.25000	760.00	.5160-01	.6460-01	.6990-01	.9349	.3855-02	.2845-02	.4960	3.923	528.0
303	235.00	.27000	761.00	.4700-01	.5860-01	.6340-01	.9349	.3499-02	.2591-02	.4570	3.435	526.1
303	235.00	.30000	762.00	.7280-01	.9140-01	.9900-01	.9349	.5465-02	.4018-02	.6940	4.207	529.8
303	235.00	.32000	763.00	.7810-01	.9800-01	.1062	.9349	.5860-02	.4309-02	.7440	4.441	529.7
303	235.00	.34000	764.00	.8340-01	.1045	.1131	.9349	.6240-02	.4603-02	.8020	4.804	528.2
303	235.00	.36000	765.00	.7800-01	.9770-01	.1058	.9349	.5835-02	.4306-02	.7510	4.559	528.0
303	235.00	.38000	766.00	.7990-01	.1000+00	.1082	.9349	.5972-02	.4408-02	.7700	4.724	527.8
305	247.00	.23000	768.00	.9250-01	.1181	.1281	.9359	.7074-02	.5113-02	.8310	6.203	540.7
305	247.00	.25000	769.00	.5920-01	.7470-01	.8090-01	.9353	.4468-02	.3270-02	.5550	4.345	533.6
305	247.00	.27000	770.00	.7440-01	.9470-01	.1029	.9353	.5686-02	.4109-02	.6740	4.932	539.3
305	247.00	.30000	772.00	.8560-01	.1084	.1176	.9353	.6498-02	.4729-02	.7890	4.851	536.3
305	247.00	.31000	773.00	.8680-01	.1098	.1190	.9353	.6577-02	.4795-02	.8050	4.908	535.4

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT40)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
305	247.00	.32000	774.00	.8690-01	.1097	.1189	.9353	.6568-02	.4800-02	.8110	4.906	534.3
305	247.00	.32500	775.00	.8460-01	.1068	.1157	.9353	.6391-02	.4675-02	.7910	4.802	534.0
305	247.00	.33000	776.00	.8780-01	.1108	.1201	.9353	.6633-02	.4848-02	.8190	4.984	534.3
305	247.00	.33500	777.00	.8900-01	.1123	.1217	.9353	.6724-02	.4916-02	.8310	5.059	534.1
305	247.00	.34000	778.00	.9200-01	.1158	.1253	.9353	.6923-02	.5080-02	.8680	5.283	532.5
305	247.00	.34500	779.00	.8690-01	.1094	.1184	.9353	.6543-02	.4798-02	.8180	4.996	532.7
305	247.00	.35000	780.00	.8930-01	.1123	.1215	.9353	.6710-02	.4931-02	.8460	5.179	531.8
305	247.00	.35500	781.00	.1500-02	.1800-02	.2000-02	.9353	.1080-03	.8042-04	.1400-01	.8800-01	525.0
303	247.00	.36000	782.00	.8570-01	.1077	.1164	.9353	.6424-02	.4727-02	.8130	4.996	530.5
303	247.00	.36500	783.00	.8650-01	.1086	.1174	.9353	.6477-02	.4770-02	.8220	5.041	530.1
303	247.00	.37000	784.00	.8750-01	.1096	.1184	.9353	.6534-02	.4827-02	.8390	5.178	528.6
303	247.00	.37500	785.00	.8000-03	.1000-02	.1100-02	.9353	.6235-04	.4612-04	.8000-02	.5000-01	528.0
303	247.00	.38000	786.00	.8370-01	.1051	.1136	.9353	.6267-02	.4619-02	.7980	4.972	529.7
303	247.00	.39000	787.00	.8920-01	.1119	.1210	.9353	.6674-02	.4923-02	.8520	5.328	529.3
303	247.00	.40000	788.00	.9720-01	.1223	.1322	.9353	.7296-02	.5366-02	.9210	5.802	530.8
304	247.00	.50000	789.00	.8500-01	.1077	.1169	.9354	.6449-02	.4687-02	.7790	5.022	536.7
304	247.00	.60000	790.00	.8380-01	.1060	.1149	.9354	.6336-02	.4619-02	.7750	5.115	535.2
304	247.00	.70000	791.00	.7980-01	.1008	.1092	.9354	.6022-02	.4402-02	.7440	5.286	534.0
304	247.00	.90000	793.00	.6030-01	.7550-01	.8160-01	.9354	.4498-02	.3326-02	.5800	3.772	528.7
314	247.00	.92600	2144.0	.4690-01	.5820-01	.6260-01	.9354	.3469-02	.2598-02	.4710	3.335	523.3
314	247.00	.93000	2149.0	.5130-01	.6400-01	.6900-01	.9354	.3824-02	.2841-02	.5030	3.670	527.5
314	250.57	.92600	2143.0	.4760-01	.5920-01	.6370-01	.9355	.3529-02	.2639-02	.4750	3.364	524.5
314	250.57	.93000	2148.0	.5820-01	.7290-01	.7860-01	.9355	.4357-02	.3225-02	.5640	4.019	529.7
304	258.00	.27000	794.00	.8210-01	.1049	.1139	.9358	.6280-02	.4529-02	.7330	5.242	541.1
304	258.00	.29000	795.00	.7480-01	.9470-01	.1024	.9358	.5649-02	.4128-02	.6920	4.287	535.4
304	258.00	.30000	796.00	.9470-01	.1205	.1305	.9358	.7200-02	.5224-02	.8580	5.225	538.6
312	258.00	.32000	798.00	.9510-01	.1215	.1319	.9358	.7314-02	.5275-02	.8560	5.173	542.5
312	258.00	.34000	802.00	.9430-01	.1198	.1297	.9358	.7193-02	.5229-02	.8660	5.256	539.2
312	258.00	.34500	803.00	.9430-01	.1197	.1296	.9358	.7184-02	.5226-02	.8670	5.278	538.9
312	258.00	.35500	805.00	.9570-01	.1217	.1318	.9358	.7310-02	.5308-02	.8770	5.336	539.6
312	258.00	.36000	806.00	.9460-01	.1199	.1297	.9358	.7193-02	.5243-02	.8750	5.343	537.9
312	258.00	.36500	807.00	.9340-01	.1183	.1280	.9358	.7095-02	.5176-02	.8660	5.301	537.6
312	258.00	.37000	808.00	.9430-01	.1194	.1292	.9358	.7163-02	.5226-02	.8750	5.371	537.5
312	258.00	.37500	809.00	.9340-01	.1182	.1279	.9358	.7089-02	.5179-02	.8690	5.340	537.0
312	258.00	.38000	810.00	.9250-01	.1171	.1267	.9358	.7023-02	.5127-02	.8590	5.308	537.2
312	258.00	.39000	811.00	.2100-02	.3000-02	.3400-02	.9358	.1911-03	.1164-03	.1300-01	.8100-01	589.1
304	258.00	.40000	812.00	.9850-01	.1243	.1342	.9358	.7403-02	.5431-02	.9200	5.706	533.6
314	258.00	.93500	2151.0	.6530-01	.8210-01	.8850-01	.9358	.4905-02	.3620-02	.6250	4.448	532.0
304	270.00	.40000-01	985.00	.4327	.5509	.4655	.9836	.2568-01	.2386-01	3.909	25.53	539.1
304	270.00	.50000-01	986.00	.4670	.5970	.5121	.9798	.2824-01	.2576-01	4.156	26.95	541.6
304	270.00	.60000-01	987.00	.4245	.5389	.4724	.9761	.2606-01	.2342-01	3.879	25.65	537.3
304	270.00	.70000-01	988.00	.4162	.5312	.4723	.9726	.2605-01	.2296-01	3.726	25.12	540.6
304	270.00	.80000-01	989.00	.3814	.4854	.4394	.9692	.2424-01	.2104-01	3.451	24.55	538.9

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT40)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
304	270.00	.10000+00	990.00	.3308	.4158	.3901	.9628	.2152-01	.1825-01	3.138	20.64	531.0
304	270.00	.15000	991.00	.2166	.2711	.2715	.9497	.1498-01	.1195-01	2.089	15.48	528.1
304	270.00	.20000	992.00	.1521	.1881	.1969	.9406	.1086-01	.8388-02	1.540	10.56	519.4
304	270.00	.23000	813.00	.1080	.1385	.1494	.9371	.8239-02	.5959-02	.9520	6.931	543.3
304	270.00	.24000	814.00	.9370-01	.1206	.1309	.9363	.7220-02	.5168-02	.8140	6.588	545.5
304	270.00	.25000	815.00	.6460-01	.8230-01	.8890-01	.9363	.4905-02	.3564-02	.5840	4.623	539.2
304	270.00	.27000	816.00	.8050-01	.1029	.1114	.9363	.6144-02	.4439-02	.7160	5.104	541.6
304	270.00	.29000	817.00	.9140-01	.1153	.1242	.9363	.6848-02	.5040-02	.8550	5.348	533.4
304	270.00	.30000	818.00	.1043	.1315	.1416	.9363	.7808-02	.5750-02	.9770	6.013	533.1
304	270.00	.31000	819.00	.1068	.1346	.1449	.9363	.7995-02	.5892-02	1.003	6.123	532.7
304	270.00	.32000	820.00	.1055	.1327	.1427	.9363	.7870-02	.5821-02	1.001	6.098	531.0
304	270.00	.32500	821.00	.1115	.1404	.1510	.9363	.8330-02	.6152-02	1.053	6.398	531.8
304	270.00	.33000	822.00	.1058	.1328	.1428	.9363	.7876-02	.5838-02	1.010	6.160	529.9
304	270.00	.33500	823.00	.1042	.1306	.1404	.9363	.7742-02	.5747-02	.9980	6.105	529.3
304	270.00	.34500	825.00	.1118	.1399	.1503	.9363	.8287-02	.6166-02	1.078	6.579	528.1
304	270.00	.35000	826.00	.2278	.2447	.2498	.9363	.1378-01	.1256-01	6.381	46.90	195.1
304	270.00	.36000	828.00	.1037	.1299	.1396	.9363	.7698-02	.5721-02	.9970	6.067	528.7
304	270.00	.36500	829.00	.1040	.1303	.1400	.9363	.7724-02	.5737-02	.9980	6.089	529.0
304	270.00	.37000	830.00	.1060	.1341	.1447	.9363	.7979-02	.5846-02	.9790	5.967	535.5
304	270.00	.37500	831.00	.1033	.1306	.1408	.9363	.7766-02	.5697-02	.9570	5.871	534.9
304	270.00	.38000	832.00	.1040	.1317	.1420	.9363	.7831-02	.5737-02	.9610	5.888	535.5
304	270.00	.39000	833.00	.1036	.1311	.1414	.9363	.7800-02	.5716-02	.9580	5.936	535.4
304	270.00	.40000	834.00	.1029	.1302	.1404	.9363	.7745-02	.5676-02	.9510	5.912	535.4
304	270.00	.50000	835.00	.1079	.1386	.1502	.9363	.8287-02	.5950-02	.9450	5.980	544.2
304	270.00	.60000	836.00	.1038	.1325	.1434	.9363	.7910-02	.5724-02	.9270	6.194	541.0
304	270.00	.70000	837.00	.1000+00	.1278	.1384	.9363	.7632-02	.5518-02	.8910	6.293	541.4
304	270.00	.80000	838.00	.9900-01	.1256	.1356	.9363	.7477-02	.5463-02	.9080	5.671	536.7
304	270.00	.90000	839.00	.8160-01	.1029	.1107	.9363	.6107-02	.4503-02	.7670	4.939	532.6
314	270.00	.92600	2141.0	.6550-01	.8200-01	.8810-01	.9363	.4880-02	.3629-02	.6350	4.386	529.6
314	270.00	.93000	2146.0	.7360-01	.9260-01	.9960-01	.9363	.5522-02	.4079-02	.7000	4.981	533.0
314	270.00	.93500	2150.0	.7590-01	.9550-01	.1028	.9363	.5696-02	.4208-02	.7230	5.141	532.9
314	289.43	.92600	2140.0	.7270-01	.9110-01	.9750-01	.9369	.5406-02	.4028-02	.7030	4.963	530.1
314	289.43	.93000	2145.0	.8050-01	.1014	.1088	.9369	.6031-02	.4460-02	.7620	5.469	533.9
304	292.50	.23000	840.00	.1033	.1338	.1441	.9378	.7946-02	.5699-02	.8810	7.094	548.4
304	292.50	.25000	841.00	.6730-01	.8610-01	.9290-01	.9369	.5124-02	.3715-02	.5990	4.656	541.7
304	292.50	.30000	843.00	.1168	.1496	.1615	.9369	.8909-02	.6445-02	1.033	6.160	542.6
304	292.50	.35000	845.00	.1193	.1519	.1636	.9369	.9022-02	.6581-02	1.079	6.639	539.0
304	292.50	.37000	846.00	.1129	.1434	.1544	.9369	.8515-02	.6226-02	1.027	6.359	538.0
304	292.50	.40000	847.00	.1120	.1422	.1529	.9369	.8435-02	.6180-02	1.025	6.422	537.0
304	292.50	.45000	848.00	.1121	.1428	.1538	.9369	.8483-02	.6181-02	1.011	6.375	539.5
304	292.50	.50000	849.00	.1224	.1576	.1704	.9369	.9400-02	.6753-02	1.064	6.847	545.4
304	292.50	.60000	851.00	.1115	.1430	.1545	.9369	.8522-02	.6150-02	.9800	6.579	543.6
304	292.50	.65000	852.00	.1106	.1417	.1531	.9369	.8442-02	.6100-02	.9750	6.648	543.1

IH72, EXTERNAL TANK CLEAN,

HU/HREF

(RVZT40)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
304	292.50	.70000	853.00	.1104	.1425	.1543	.9369	.8511-02	.6089-02	.9490	6.660	547.1
304	292.50	.75000	854.00	.9490-01	.1211	.1306	.9369	.7205-02	.5232-02	.8470	5.512	541.0
304	292.50	.80000	855.00	.1027	.1308	.1409	.9369	.7774-02	.5663-02	.9250	6.040	539.6
314	292.50	.82000	2129.0	.1077	.1364	.1467	.9369	.8130-02	.5972-02	1.001	6.162	537.1
314	292.50	.83000	2130.0	.1043	.1324	.1424	.9369	.7895-02	.5779-02	.9590	5.949	538.8
314	292.50	.84000	2131.0	.2300-02	.2900-02	.3100-02	.9369	.1719-03	.1277-03	.2200-01	.1380	531.8
314	292.50	.85000	2132.0	.1075	.1362	.1465	.9369	.8120-02	.5959-02	.9960	6.217	537.6
314	292.50	.86000	2133.0	.1079	.1366	.1469	.9369	.8142-02	.5981-02	1.002	6.223	537.1
314	292.50	.87000	2134.0	.1076	.1363	.1466	.9369	.8122-02	.5964-02	.9980	6.233	537.3
314	292.50	.88000	2135.0	.1115	.1412	.1518	.9369	.8414-02	.6181-02	1.036	6.469	537.1
314	292.50	.89000	2136.0	.1083	.1368	.1469	.9369	.8142-02	.6005-02	1.018	6.379	535.2
304	292.50	.90000	856.00	.8960-01	.1132	.1216	.9369	.6707-02	.4940-02	.8320	5.428	534.6
314	292.50	.92600	2138.0	.7370-01	.9230-01	.9890-01	.9369	.5480-02	.4084-02	.7130	5.028	530.2
314	292.50	.93000	2139.0	.8130-01	.1023	.1097	.9369	.6082-02	.4508-02	.7750	5.598	532.8
314	301.50	.82000	2116.0	.1061	.1341	.1441	.9369	.7987-02	.5878-02	.9900	6.097	536.3
314	301.50	.83000	2117.0	.1039	.1313	.1410	.9369	.7815-02	.5758-02	.9720	5.958	535.8
314	301.50	.83500	2118.0	.1047	.1323	.1421	.9369	.7873-02	.5800-02	.9790	5.953	535.8
314	301.50	.84000	2119.0	.1057	.1335	.1433	.9369	.7944-02	.5858-02	.9910	6.078	535.4
314	301.50	.85000	2120.0	.1050	.1324	.1421	.9369	.7878-02	.5817-02	.9880	6.076	534.8
314	301.50	.86000	2021.0	.1086	.1374	.1476	.9369	.8182-02	.6018-02	1.011	6.247	536.6
314	301.50	.87000	2122.0	.1098	.1387	.1490	.9369	.8256-02	.6087-02	1.030	6.349	535.5
314	301.50	.88000	2123.0	.1047	.1322	.1420	.9369	.7871-02	.5803-02	.9810	6.083	535.5
314	301.50	.89000	2124.0	.1063	.1339	.1436	.9369	.7960-02	.5894-02	1.009	6.316	533.4
314	301.50	.90000	2125.0	.8770-01	.1098	.1176	.9369	.6515-02	.4860-02	.8500	5.374	529.7
314	301.50	.92600	2127.0	.9230-01	.1158	.1241	.9369	.6878-02	.5117-02	.8890	5.615	531.0
314	301.50	.93500	2128.0	.8910-01	.1120	.1201	.9369	.6658-02	.4939-02	.8500	5.775	532.5
314	305.40	.82000	2113.0	.1054	.1332	.1431	.9369	.7931-02	.5840-02	.9850	6.036	536.0
314	305.40	.83000	2114.0	.1060	.1338	.1437	.9369	.7965-02	.5877-02	.9970	6.113	535.0
314	305.40	.83500	2115.0	.1058	.1338	.1437	.9369	.7965-02	.5865-02	.9890	6.113	536.0
304	305.40	.84000	857.00	.1044	.1326	.1427	.9369	.7869-02	.5761-02	.9540	5.923	537.4
312	305.40	.85000	858.00	.2000-03	.2000-03	.2000-03	.9369	.1023-04	.8414-05	.2000-02	.1400-01	454.1
312	305.40	.86000	859.00	.1007	.1284	.1384	.9369	.7672-02	.5580-02	.9110	5.723	541.6
312	305.40	.87000	860.00	.1027	.1312	.1416	.9369	.7849-02	.5691-02	.9210	5.802	542.9
312	305.40	.88000	861.00	.1020	.1302	.1405	.9369	.7788-02	.5653-02	.9180	5.781	542.5
312	305.40	.89000	862.00	.1013	.1295	.1396	.9369	.7741-02	.5619-02	.9120	5.775	542.5
312	305.40	.90000	863.00	.9260-01	.1180	.1272	.9369	.7052-02	.5135-02	.8410	5.359	541.1
312	305.40	.91000	864.00	.6250-01	.7900-01	.8490-01	.9369	.4705-02	.3465-02	.5850	4.277	536.0
312	305.40	.92600	865.00	.8110-01	.1033	.1114	.9369	.6175-02	.4495-02	.7350	5.343	541.3
312	309.30	.80000	866.00	.9000-03	.1000-02	.1000-02	.9368	.5746-04	.4824-04	.1300-01	.9000-01	427.4
312	309.30	.81000	867.00	.9700-01	.1241	.1340	.9368	.7428-02	.5376-02	.8660	5.423	543.6
312	309.30	.82000	868.00	.5500-02	.5900-02	.6100-02	.9368	.3366-03	.3037-03	.1380	1.018	249.0
312	309.30	.83000	869.00	.8040-01	.1021	.1100	.9368	.6097-02	.4457-02	.7380	4.642	539.2
312	315.00	.50000-01	871.00	.4711	.6099	.5145	.9815	.2853-01	.2612-01	4.045	25.82	550.0

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT40)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
312	315.00	.60000-01	872.00	.4356	.5632	.4844	.9778	.2686-01	.2415-01	3.757	24.92	549.3
304	315.00	.70000-01	873.00	.4198	.5358	.4724	.9743	.2605-01	.2315-01	3.759	25.65	540.6
304	315.00	.80000-01	874.00	.3700	.4695	.4221	.9709	.2328-01	.2041-01	3.385	24.02	537.1
304	315.00	.10000+00	875.00	.3335	.4202	.3910	.9644	.2156-01	.1839-01	3.131	20.69	532.7
304	315.00	.15000	876.00	.2327	.2931	.2918	.9509	.1609-01	.1283-01	2.188	16.13	532.5
304	315.00	.20000	877.00	.1534	.1907	.1990	.9414	.1098-01	.8461-02	1.522	10.39	523.0
304	315.00	.35000	878.00	.1170	.1486	.1601	.9367	.8833-02	.6451-02	1.064	6.643	538.0
304	315.00	.40000	879.00	.1110	.1410	.1518	.9367	.8374-02	.6122-02	1.013	6.449	537.5
314	315.00	.41000	2111.0	.2100-02	.2700-02	.2900-02	.9367	.1605-03	.1191-03	.2100-01	.1310	531.7
304	315.00	.50000	880.00	.1006	.1291	.1396	.9367	.7701-02	.5546-02	.8820	6.062	544.0
304	315.00	.55000	881.00	.8650-01	.1106	.1194	.9367	.6584-02	.4771-02	.7710	5.147	541.4
304	315.00	.60000	882.00	.1064	.1361	.1469	.9367	.8105-02	.5871-02	.9470	6.385	541.6
304	315.00	.65000	883.00	.1097	.1402	.1514	.9367	.8352-02	.6051-02	.9770	6.685	541.5
304	315.00	.70000	884.00	.1038	.1329	.1436	.9367	.7922-02	.5726-02	.9190	6.544	542.5
304	315.00	.75000	885.00	.9270-01	.1181	.1274	.9367	.7025-02	.5112-02	.8350	5.282	539.6
304	315.00	.80000	886.00	.1011	.1282	.1381	.9367	.7615-02	.5576-02	.9260	5.852	536.8
304	315.00	.84000	887.00	.1006	.1273	.1370	.9367	.7556-02	.5549-02	.9290	5.872	535.5
312	315.00	.85000	888.00	.1041	.1325	.1429	.9367	.7924-02	.5773-02	.9490	6.034	540.5
312	315.00	.87000	890.00	.9720-01	.1238	.1335	.9367	.7403-02	.5389-02	.8840	5.634	540.8
312	315.00	.88000	891.00	.1002	.1277	.1378	.9367	.7641-02	.5554-02	.9070	5.815	541.5
312	315.00	.89000	892.00	.9680-01	.1232	.1329	.9367	.7368-02	.5365-02	.8810	5.746	540.7
312	315.00	.90000	893.00	.9410-01	.1196	.1290	.9367	.7150-02	.5216-02	.8600	5.683	539.9
312	315.00	.91000	894.00	.6160-01	.7770-01	.8350-01	.9367	.4632-02	.3417-02	.5810	4.265	534.7
312	315.00	.92600	895.00	.8130-01	.1035	.1116	.9367	.6190-02	.4505-02	.7390	5.386	540.9
312	322.30	.42000	897.00	.1030	.1310	.1414	.9365	.7838-02	.5713-02	.9430	6.086	539.7
312	322.30	.43500	898.00	.9980-01	.1271	.1372	.9365	.7608-02	.5533-02	.9080	5.691	540.7
312	322.30	.45000	899.00	.1025	.1308	.1414	.9365	.7840-02	.5684-02	.9250	6.070	542.0
312	322.30	.50000	900.00	.9980-01	.1287	.1397	.9365	.7743-02	.5534-02	.8680	5.782	547.9
312	322.30	.60000	901.00	.9720-01	.1242	.1343	.9365	.7448-02	.5390-02	.8730	5.811	542.8
314	324.45	.40500	2109.0	.2700-02	.3400-02	.3600-02	.9364	.2017-03	.1497-03	.2600-01	.1650	530.8
314	324.45	.41000	2110.0	.1051	.1325	.1426	.9364	.7905-02	.5825-02	.9910	6.287	534.5
314	324.45	.92600	2164.0	.7050-01	.8810-01	.9440-01	.9364	.5234-02	.3907-02	.6900	4.955	528.0
314	326.85	.40000	2107.0	.7900-02	.9900-02	.1060-01	.9364	.5874-03	.4363-03	.7600-01	.4830	530.3
314	326.85	.40500	2108.0	.1014	.1274	.1369	.9364	.7590-02	.5619-02	.9700	6.162	532.0
313	326.85	.44000	2021.0	.9970-01	.1267	.1368	.9363	.7578-02	.5521-02	.9130	5.823	539.3
313	326.85	.54600	2024.0	.4820-01	.6090-01	.6570-01	.9363	.3637-02	.2670-02	.4500	3.035	535.9
313	326.85	.58100	2025.0	.8970-01	.1150	.1246	.9363	.6901-02	.4968-02	.7960	5.574	544.4
313	326.85	.61600	2026.0	.9340-01	.1195	.1293	.9363	.7164-02	.5173-02	.8350	5.814	543.2
313	326.85	.65200	2027.0	.9230-01	.1178	.1274	.9363	.7057-02	.5112-02	.8320	5.799	541.8
313	326.85	.68600	2028.0	.8990-01	.1151	.1247	.9363	.6909-02	.4977-02	.7980	5.609	544.2
313	326.85	.72260	2029.0	.6900-01	.8790-01	.9500-01	.9363	.5262-02	.3823-02	.6270	4.388	540.6
313	326.85	.75790	2030.0	.5940-01	.7520-01	.8100-01	.9363	.4488-02	.3290-02	.5530	3.551	536.6
313	326.85	.79310	2031.0	.9440-01	.1203	.1301	.9363	.7206-02	.5226-02	.8530	5.362	541.3

IH72, EXTERNAL TANK CLEAN,

HU/HREF

(RVZT40)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
313	326.85	.82830	2032.0	.9770-01	.1245	.1345	.9363	.7451-02	.5412-02	.8870	5.623	540.7
313	326.85	.86350	2033.0	.9170-01	.1166	.1259	.9363	.6975-02	.5081-02	.8390	5.279	539.4
313	326.85	.90000	2034.0	.1028	.1308	.1413	.9363	.7825-02	.5696-02	.9390	5.857	539.7
314	326.85	.92600	2163.0	.7010-01	.8750-01	.9390-01	.9364	.5205-02	.3887-02	.6880	4.941	527.6
313	326.85	.93390	2035.0	.8020-01	.1019	.1100	.9363	.6092-02	.4441-02	.7350	4.945	539.1
314	330.20	.40000	2104.0	.1074	.1352	.1456	.9362	.8070-02	.5952-02	1.019	6.467	533.4
314	330.20	.40500	2105.0	.1065	.1338	.1440	.9362	.7983-02	.5901-02	1.017	6.456	532.4
314	330.20	.41000	2106.0	.1034	.1301	.1401	.9362	.7766-02	.5731-02	.9830	6.221	533.2
312	330.20	.42000	905.00	.9800-01	.1240	.1338	.9362	.7417-02	.5436-02	.9150	5.930	536.5
312	330.20	.43500	906.00	.9490-01	.1205	.1302	.9362	.7221-02	.5262-02	.8720	5.678	539.1
312	330.20	.45000	907.00	.9580-01	.1221	.1321	.9362	.7323-02	.5310-02	.8690	5.683	541.3
312	330.20	.50000	908.00	.8870-01	.1142	.1240	.9362	.6877-02	.4920-02	.7780	5.562	546.8
312	330.20	.60000	909.00	.9620-01	.1228	.1330	.9362	.7373-02	.5334-02	.8670	5.687	542.3
312	330.20	.70000	910.00	.9460-01	.1214	.1317	.9362	.7300-02	.5243-02	.8370	5.646	545.2
312	330.20	.80000	911.00	.7910-01	.1006	.1087	.9362	.6028-02	.4387-02	.7250	4.663	539.6
312	330.20	.87000	912.00	.2360-01	.2970-01	.3190-01	.9362	.1769-02	.1310-02	.2270	1.461	531.7
314	330.20	.92600	2162.0	.6890-01	.8600-01	.9230-01	.9362	.5115-02	.3819-02	.6780	4.848	527.3
314	334.98	.92600	2161.0	.6680-01	.8340-01	.8960-01	.9360	.4967-02	.3700-02	.6540	4.661	528.0
312	334.98	.93500	913.00	.2750-01	.3440-01	.3700-01	.9360	.2051-02	.1527-02	.2700	1.980	528.2
312	334.98	.94500	914.00	.3110-01	.3860-01	.4130-01	.9360	.2292-02	.1725-02	.3140	2.290	522.6
312	337.50	.40000-01	915.00	.4567	.5877	.4976	.9815	.2759-01	.2532-01	4.001	25.36	546.8
312	337.50	.50000-01	916.00	.4532	.5828	.5029	.9778	.2788-01	.2513-01	3.984	25.70	546.3
312	337.50	.70000-01	918.00	.1511	.1838	.1687	.9707	.9354-02	.8376-02	1.655	11.74	507.2
312	337.50	.80000-01	919.00	.3624	.4607	.4211	.9673	.2335-01	.2010-01	3.321	22.75	539.6
312	337.50	.10000+00	920.00	.3040	.3823	.3616	.9611	.2005-01	.1685-01	2.898	19.50	532.9
312	337.50	.15000	921.00	.2176	.2735	.2758	.9484	.1529-01	.1207-01	2.082	15.20	532.3
312	337.50	.20000	922.00	.1382	.1717	.1806	.9398	.1001-01	.7661-02	1.384	9.329	524.1
314	337.50	.42000	923.00	.8960-01	.1133	.1225	.9359	.6791-02	.4967-02	.8360	5.480	536.6
312	337.50	.42500	2167.0	.9540-01	.1198	.1291	.9359	.7154-02	.5285-02	.9140	5.936	531.8
312	337.50	.43500	924.00	.9570-01	.1213	.1312	.9359	.7274-02	.5304-02	.8850	5.814	538.0
312	337.50	.85000	926.00	.8410-01	.1064	.1149	.9359	.6373-02	.4662-02	.7850	5.102	536.5
312	337.50	.86000	927.00	.8960-01	.1119	.1204	.9359	.6673-02	.4965-02	.8770	5.740	528.3
312	337.50	.87000	928.00	.8430-01	.1066	.1151	.9359	.6384-02	.4671-02	.7860	5.143	536.5
312	337.50	.88000	929.00	.3920-01	.4830-01	.5160-01	.9359	.2862-02	.2173-02	.4080	2.707	517.3
312	337.50	.89000	930.00	.8710-01	.1108	.1201	.9359	.6656-02	.4828-02	.7940	5.244	540.4
312	337.50	.90000	931.00	.7810-01	.9930-01	.1075	.9359	.5962-02	.4331-02	.7150	4.837	539.7
312	337.50	.91000	932.00	.5320-01	.6700-01	.7230-01	.9359	.4011-02	.2947-02	.5020	3.697	534.5
304	337.50	.92600	933.00	.6490-01	.8150-01	.8790-01	.9359	.4846-02	.3581-02	.6180	4.544	530.4
304	343.12	.41500	934.00	.9720-01	.1224	.1322	.9357	.7292-02	.5359-02	.9140	5.970	532.4
304	343.12	.42000	935.00	.9210-01	.1161	.1255	.9357	.6923-02	.5080-02	.8630	5.684	533.1
304	343.12	.42500	936.00	.8990-01	.1131	.1222	.9357	.6739-02	.4958-02	.8480	5.609	531.9
304	343.12	.44500	939.00	.8820-01	.1112	.1202	.9357	.6627-02	.4863-02	.8260	5.521	533.2
304	343.12	.45000	940.00	.8870-01	.1118	.1208	.9357	.6663-02	.4890-02	.8310	5.554	533.1

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT40)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
304	343.12	.50000	941.00	.9020-01	.1148	.1246	.9357	.6872-02	.4973-02	.8140	5.541	539.3
304	343.12	.60000	942.00	.9180-01	.1163	.1259	.9357	.6947-02	.5064-02	.8450	5.478	536.1
304	343.12	.80000	944.00	.8150-01	.1031	.1116	.9357	.6154-02	.4497-02	.7550	4.955	535.1
314	345.56	.42500	2168.0	.9070-01	.1137	.1227	.9356	.6799-02	.5029-02	.8770	5.702	530.3
314	345.56	.92600	2160.0	.6200-01	.7700-01	.8280-01	.9357	.4590-02	.3434-02	.6180	4.414	524.7
304	348.00	.35000	945.00	.9220-01	.1159	.1253	.9355	.6909-02	.5084-02	.8730	5.577	531.2
304	348.00	.36000	946.00	.9120-01	.1148	.1241	.9355	.6845-02	.5033-02	.8620	5.522	531.7
304	348.00	.37000	947.00	.9070-01	.1139	.1230	.9355	.6785-02	.5003-02	.8640	5.554	530.3
312	348.00	.37500	948.00	.8960-01	.1130	.1223	.9355	.6780-02	.4969-02	.8460	5.428	534.5
312	348.00	.38000	949.00	.9110-01	.1149	.1243	.9355	.6892-02	.5051-02	.8600	5.563	534.6
312	348.00	.38500	950.00	.8860-01	.1118	.1209	.9355	.6705-02	.4915-02	.8370	5.433	534.4
312	348.00	.39000	951.00	.9010-01	.1136	.1229	.9355	.6816-02	.4995-02	.8510	5.551	534.6
312	348.00	.39500	952.00	.9130-01	.1151	.1246	.9355	.6906-02	.5060-02	.8610	5.541	534.6
312	348.00	.40000	953.00	.8850-01	.1115	.1206	.9355	.6685-02	.4905-02	.8380	5.486	534.0
312	348.00	.41000	955.00	.9120-01	.1151	.1246	.9355	.6911-02	.5059-02	.8590	5.637	535.0
312	348.00	.42000	957.00	.8940-01	.1128	.1221	.9355	.6770-02	.4958-02	.8420	5.562	534.9
312	348.00	.42500	958.00	.8960-01	.1133	.1228	.9355	.6806-02	.4970-02	.8380	5.529	536.2
312	348.00	.43000	959.00	.8540-01	.1076	.1165	.9355	.6458-02	.4732-02	.8060	5.304	534.6
312	348.00	.44000	960.00	.8610-01	.1085	.1174	.9355	.6508-02	.4772-02	.8130	5.372	534.3
312	348.00	.44500	961.00	.8320-01	.1051	.1139	.9355	.6312-02	.4614-02	.7800	5.149	535.7
312	348.00	.85000	968.00	.7820-01	.9870-01	.1069	.9355	.5925-02	.4333-02	.7340	4.786	535.5
312	348.00	.86000	969.00	.8190-01	.1038	.1125	.9355	.6237-02	.4543-02	.7610	4.971	537.4
313	348.00	.91000	974.00	.4670-01	.5860-01	.6330-01	.9355	.3505-02	.2586-02	.4490	3.299	531.1
314	352.20	.93700	2089.0	.5260-01	.6560-01	.7080-01	.9353	.3922-02	.2914-02	.5170	3.654	527.2
314	354.00	.42500	2169.0	.8590-01	.1073	.1159	.9352	.6425-02	.4759-02	.8380	5.453	528.6
314	354.00	.43000	2174.0	.8560-01	.1071	.1158	.9352	.6416-02	.4743-02	.8300	5.400	529.6
314	354.00	.43500	2177.0	.8360-01	.1044	.1127	.9352	.6248-02	.4633-02	.8180	5.327	528.1
314	354.00	.44000	2179.0	.8220-01	.1029	.1111	.9352	.6158-02	.4557-02	.8000	5.204	529.1
314	355.16	.92600	2158.0	.4900-01	.6100-01	.6580-01	.9352	.3648-02	.2717-02	.4860	3.527	525.7

EXTERNAL TANK

PARAMETRIC DATA

ALPHA = .0000 BETA = -9.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
300	-.1000-01	-9.000	3.010	36.60	702.0	249.7	.9820	6.229	2330.	.3300-03	.1998-06	3.850
301	.0000	-9.000	3.010	36.90	700.0	248.9	.9890	6.275	2327.	.3335-03	.1992-06	3.896
302	-.1000-01	-9.000	3.010	36.80	701.0	249.4	.9860	6.253	2329.	.3316-03	.1996-06	3.870
309	-.1000-01	-9.000	3.010	37.00	705.0	250.5	.9930	6.295	2335.	.3324-03	.2004-06	3.872
310	-.1000-01	-9.000	3.010	37.10	705.0	250.6	.9940	6.304	2335.	.3328-03	.2005-06	3.876
311	-.1000-01	-9.000	3.010	37.00	705.0	250.6	.9930	6.300	2335.	.3326-03	.2005-06	3.874

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
300	.5504-01	.9244-02
301	.5522-01	.9192-02
302	.5514-01	.9221-02
309	.5536-01	.9216-02
310	.5540-01	.9210-02
311	.5539-01	.9213-02

TEST DATA

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
301	.00000	.25000-01	2187.0	.4687	.6925	.5766	.9710	.3184-01	.2588-01	2.802	19.35	591.7
300	.00000	.40000-01	600.00	.3652	.5033	.4453	.9672	.2451-01	.2010-01	2.570	16.30	574.2
300	.00000	.50000-01	601.00	.3734	.5121	.4646	.9638	.2557-01	.2055-01	2.664	16.96	572.4
300	.00000	.70000-01	603.00	.3037	.4082	.3881	.9575	.2136-01	.1672-01	2.292	15.50	564.9
300	.00000	.80000-01	604.00	.3087	.4119	.3994	.9547	.2198-01	.1699-01	2.379	15.36	562.0
300	.00000	.15000	606.00	.1488	.1895	.2001	.9403	.1101-01	.8189-02	1.338	9.766	538.7
300	.00000	.20000	607.00	.1029	.1291	.1394	.9355	.7671-02	.5662-02	.9790	6.444	529.1
300	.00000	.21000	608.00	.7780-01	.9950-01	.1086	.9350	.5978-02	.4282-02	.6880	4.768	541.3
300	.00000	.22000	609.00	.6320-01	.8060-01	.8800-01	.9347	.4844-02	.3477-02	.5650	4.217	539.6
300	.00000	.30000	610.00	.5330-01	.6770-01	.7390-01	.9345	.4069-02	.2933-02	.4830	3.323	537.3
300	.00000	.36000	612.00	.5250-01	.6610-01	.7190-01	.9345	.3957-02	.2892-02	.4940	3.346	531.2
300	.00000	.37500	614.00	.5240-01	.6600-01	.7180-01	.9345	.3950-02	.2885-02	.4920	3.334	531.5

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT41)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
302	.00000	.38000	615.00	.5580-01	.7010-01	.7620-01	.9345	.4200-02	.3076-02	.5280	3.580	529.8
302	.00000	.38500	616.00	.5570-01	.6990-01	.7600-01	.9345	.4191-02	.3069-02	.5270	3.572	529.8
302	.00000	.39000	617.00	.2600-02	.3300-02	.3600-02	.9345	.1980-03	.1461-03	.2600-01	.1730	526.3
302	.00000	.39500	618.00	.5730-01	.7200-01	.7830-01	.9345	.4316-02	.3160-02	.5420	3.686	529.9
302	.00000	.40000	619.00	.5750-01	.7230-01	.7860-01	.9345	.4336-02	.3171-02	.5420	3.663	530.5
302	.00000	.40500	620.00	.5960-01	.7450-01	.8080-01	.9345	.4453-02	.3286-02	.5760	3.910	526.2
302	.00000	.41000	621.00	.5920-01	.7410-01	.8040-01	.9345	.4435-02	.3266-02	.5690	3.862	527.2
302	.00000	.41500	622.00	.6120-01	.7680-01	.8340-01	.9345	.4597-02	.3376-02	.5840	3.950	528.5
302	.00000	.43000	625.00	.5870-01	.7340-01	.7960-01	.9345	.4387-02	.3237-02	.5670	3.854	526.2
302	.00000	.44000	626.00	.5510-01	.6890-01	.7460-01	.9345	.4115-02	.3041-02	.5350	3.637	525.4
302	.00000	.44500	627.00	.5370-01	.6710-01	.7270-01	.9345	.4010-02	.2962-02	.5210	3.572	525.6
302	.00000	.45000	628.00	.5240-01	.6550-01	.7090-01	.9345	.3912-02	.2891-02	.5090	3.491	525.4
302	.00000	.45500	629.00	.5210-01	.6510-01	.7050-01	.9345	.3888-02	.2872-02	.5050	3.517	525.6
300	.00000	.46000	630.00	.4920-01	.6200-01	.6750-01	.9345	.3714-02	.2708-02	.4600	3.113	532.3
300	.00000	.47000	631.00	.5020-01	.6330-01	.6890-01	.9345	.3795-02	.2763-02	.4670	3.161	533.0
300	.00000	.48000	632.00	.4880-01	.6190-01	.6750-01	.9345	.3714-02	.2689-02	.4480	3.047	535.4
300	.00000	.49000	633.00	.4800-01	.6070-01	.6610-01	.9345	.3638-02	.2643-02	.4440	3.053	533.9
300	.00000	.50000	634.00	.4470-01	.5630-01	.6130-01	.9345	.3372-02	.2458-02	.4170	2.936	532.5
300	.00000	.55000	635.00	.3670-01	.4610-01	.5010-01	.9345	.2760-02	.2017-02	.3450	2.309	531.1
300	.00000	.60000	636.00	.5340-01	.6720-01	.7300-01	.9345	.4020-02	.2937-02	.5010	3.257	531.4
300	.00000	.65000	637.00	.5160-01	.6490-01	.7050-01	.9345	.3878-02	.2843-02	.4900	3.195	529.8
300	.00000	.70000	638.00	.4620-01	.5830-01	.6340-01	.9345	.3488-02	.2544-02	.4320	2.982	532.1
300	.00000	.75000	639.00	.2870-01	.3600-01	.3910-01	.9345	.2150-02	.1578-02	.2730	1.774	529.3
300	.00000	.80000	640.00	.4140-01	.5190-01	.5630-01	.9345	.3100-02	.2281-02	.3970	2.514	527.9
300	.00000	.85000	641.00	.4110-01	.5140-01	.5580-01	.9345	.3070-02	.2264-02	.3970	2.533	526.8
300	.00000	.87000	643.00	.4260-01	.5330-01	.5790-01	.9345	.3186-02	.2344-02	.4080	2.657	528.0
300	.00000	.88000	644.00	.4140-01	.5190-01	.5630-01	.9345	.3100-02	.2278-02	.3950	2.594	528.6
302	.00000	.89000	645.00	.4610-01	.5760-01	.6250-01	.9345	.3444-02	.2540-02	.4450	2.957	526.4
302	.00000	.92600	648.00	.4030-01	.5010-01	.5410-01	.9345	.2985-02	.2224-02	.4010	2.961	521.3
302	.00000	.95000	649.00	.5580-01	.6920-01	.7480-01	.9345	.4125-02	.3078-02	.5570	4.117	520.5
311	5.6250	.42500	2170.0	.5530-01	.6960-01	.7570-01	.9345	.4191-02	.3065-02	.5270	3.450	532.9
311	5.6250	.43500	2178.0	.4620-01	.5790-01	.6280-01	.9345	.3476-02	.2560-02	.4480	2.940	529.6
302	11.250	.35000	650.00	.5400-01	.6780-01	.7360-01	.9345	.4057-02	.2979-02	.5150	3.493	528.6
302	11.250	.36000	651.00	.7000-03	.8000-03	.9000-03	.9345	.4986-04	.3677-04	.6000-02	.4400-01	526.5
302	11.250	.37000	652.00	.5320-01	.6680-01	.7250-01	.9345	.3998-02	.2934-02	.5070	3.439	528.7
302	11.250	.38000	654.00	.5080-01	.6370-01	.6910-01	.9345	.3812-02	.2804-02	.4870	3.317	527.7
302	11.250	.39500	657.00	.5100-01	.6390-01	.6930-01	.9345	.3820-02	.2811-02	.4890	3.327	527.6
302	11.250	.40500	659.00	.5150-01	.6450-01	.7000-01	.9345	.3861-02	.2837-02	.4920	3.356	528.2
302	11.250	.41000	660.00	.5100-01	.6390-01	.6940-01	.9345	.3824-02	.2811-02	.4880	3.320	528.0
302	11.250	.41500	661.00	.4980-01	.6230-01	.6760-01	.9345	.3726-02	.2744-02	.4780	3.246	527.2
302	11.250	.42000	662.00	.5210-01	.6530-01	.7090-01	.9345	.3911-02	.2874-02	.4980	3.391	528.1
302	11.250	.42500	663.00	.4960-01	.6210-01	.6740-01	.9345	.3719-02	.2734-02	.4750	3.240	527.9
302	11.250	.43000	664.00	.4940-01	.6180-01	.6700-01	.9345	.3693-02	.2725-02	.4780	3.293	526.2

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT41)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
302	11.250	.44000	665.00	.4380-01	.5480-01	.5940-01	.9345	.3277-02	.2417-02	.4230	2.901	526.4
302	11.250	.45000	666.00	.4710-01	.5890-01	.6390-01	.9345	.3524-02	.2599-02	.4550	3.120	526.3
302	11.250	.45500	667.00	.4440-01	.5560-01	.6030-01	.9345	.3328-02	.2450-02	.4270	2.925	527.2
302	11.250	.46000	668.00	.4610-01	.5770-01	.6260-01	.9345	.3452-02	.2544-02	.4440	3.055	526.8
302	11.250	.47000	669.00	.4210-01	.5280-01	.5720-01	.9345	.3157-02	.2322-02	.4030	2.778	527.8
302	11.250	.48000	670.00	.5200-01	.6520-01	.7070-01	.9345	.3900-02	.2865-02	.4960	3.419	528.2
302	11.250	.49000	671.00	.4520-01	.5660-01	.6140-01	.9345	.3389-02	.2491-02	.4320	2.969	528.0
302	11.250	.50000	672.00	.4270-01	.5340-01	.5780-01	.9345	.3190-02	.2354-02	.4130	2.898	526.2
302	11.250	.70000	674.00	.3910-01	.4880-01	.5290-01	.9345	.2918-02	.2159-02	.3810	2.623	524.8
302	11.250	.80000	675.00	.6500-02	.8100-02	.8900-02	.9345	.4881-03	.3568-03	.6100-01	.3800	530.6
302	11.250	.85000	676.00	.3880-01	.4830-01	.5230-01	.9345	.2882-02	.2142-02	.3830	2.466	522.6
302	11.250	.86000	677.00	.3940-01	.4910-01	.5310-01	.9345	.2927-02	.2173-02	.3870	2.507	523.1
302	11.250	.87000	678.00	.4000-01	.4990-01	.5400-01	.9345	.2976-02	.2207-02	.3920	2.560	523.7
302	11.250	.88000	679.00	.4480-01	.5590-01	.6060-01	.9345	.3339-02	.2473-02	.4380	2.889	524.4
302	11.250	.90000	681.00	.4170-01	.5180-01	.5600-01	.9345	.3087-02	.2301-02	.4160	2.839	520.9
302	11.250	.91000	682.00	.3060-01	.3760-01	.4050-01	.9345	.2234-02	.1689-02	.3180	2.359	513.2
302	11.250	.92600	683.00	.5100-01	.6310-01	.6810-01	.9345	.3757-02	.2810-02	.5120	3.799	519.3
302	11.250	.95000	684.00	.5660-01	.7010-01	.7580-01	.9345	.4179-02	.3119-02	.5650	4.139	520.2
302	17.000	.33000	685.00	.5300-01	.6650-01	.7220-01	.9345	.3984-02	.2925-02	.5060	3.431	528.6
302	17.000	.34000	686.00	.5130-01	.6420-01	.6970-01	.9345	.3844-02	.2826-02	.4900	3.328	527.9
302	17.000	.35000	687.00	.5060-01	.6340-01	.6870-01	.9345	.3790-02	.2793-02	.4880	3.311	526.8
311	17.000	.35500	2102.0	.5110-01	.6400-01	.6940-01	.9345	.3843-02	.2829-02	.4950	3.268	529.7
302	17.000	.36000	688.00	.5080-01	.6350-01	.6880-01	.9345	.3796-02	.2801-02	.4910	3.334	526.2
302	17.000	.37000	689.00	.4940-01	.6190-01	.6710-01	.9345	.3699-02	.2727-02	.4770	3.237	526.6
302	17.000	.37500	690.00	.5000-01	.6250-01	.6770-01	.9345	.3736-02	.2757-02	.4830	3.292	526.1
311	17.000	.42500	2171.0	.4860-01	.6080-01	.6590-01	.9345	.3648-02	.2691-02	.4730	3.063	528.8
311	17.000	.43000	2176.0	.4560-01	.5690-01	.6170-01	.9345	.3418-02	.2526-02	.4470	2.935	527.8
300	17.000	.50000	691.00	.4530-01	.5660-01	.6130-01	.9345	.3375-02	.2491-02	.4370	2.971	526.4
300	17.000	.60000	692.00	.4380-01	.5430-01	.5870-01	.9345	.3232-02	.2411-02	.4370	2.854	520.9
300	17.000	.70000	693.00	.2850-01	.3550-01	.3840-01	.9345	.2114-02	.1567-02	.2790	1.912	524.3
300	17.000	.80000	694.00	.2980-01	.3700-01	.4000-01	.9345	.2201-02	.1643-02	.2980	1.895	520.9
300	17.000	.92600	696.00	.3740-01	.4650-01	.5030-01	.9345	.2771-02	.2059-02	.3680	2.728	523.2
311	20.980	.35500	2098.0	.4380-01	.5450-01	.5900-01	.9345	.3271-02	.2423-02	.4320	2.897	526.5
311	20.980	.36000	2099.0	.4640-01	.5790-01	.6270-01	.9345	.3474-02	.2569-02	.4550	3.028	527.4
311	20.980	.36500	2100.0	.4640-01	.5780-01	.6260-01	.9345	.3466-02	.2569-02	.4580	3.048	526.3
311	23.070	.35500	2094.0	-.2850-01	-.2270-01	-.2140-01	.9345	-.1185-02	-.1580-02	.2190	1.253	843.2
311	23.070	.36000	2095.0	.4610-01	.5750-01	.6220-01	.9345	.3447-02	.2554-02	.4550	3.024	526.6
311	23.070	.36500	2096.0	.4620-01	.5750-01	.6220-01	.9345	.3446-02	.2556-02	.4570	3.042	525.8
310	23.070	.43500	2000.0	.4880-01	.6060-01	.6550-01	.9345	.3631-02	.2704-02	.4890	3.170	523.9
310	23.070	.56890	2001.0	.3700-01	.4580-01	.4950-01	.9345	.2742-02	.2052-02	.3760	2.610	521.2
310	23.070	.70270	2002.0	.3170-01	.3920-01	.4230-01	.9345	.2345-02	.1757-02	.3240	2.338	520.5
310	23.070	.83500	2003.0	.4210-01	.5210-01	.5620-01	.9345	.3112-02	.2334-02	.4310	2.778	519.9
310	23.070	.90000	2004.0	.3900-01	.4810-01	.5190-01	.9345	.2875-02	.2159-02	.4000	2.724	519.5

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT41)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
311	23.070	.92600	2154.0	.3760-01	.4660-01	.5040-01	.9345	.2789-02	.2083-02	.3800	2.744	522.3
300	29.800	.70000-01	700.00	.2508	.3309	.3279	.9514	.1805-01	.1381-01	2.004	13.48	556.9
300	29.800	.10000+00	701.00	.2071	.2650	.2733	.9446	.1504-01	.1140-01	1.829	11.69	541.5
300	29.800	.15000	702.00	.1185	.1491	.1595	.9374	.8780-02	.6523-02	1.116	8.045	531.0
300	29.800	.20000	703.00	.7160-01	.8880-01	.9590-01	.9346	.5276-02	.3942-02	.7160	4.834	520.4
300	29.800	.30000	704.00	.4210-01	.5300-01	.5770-01	.9345	.3175-02	.2318-02	.3950	2.819	531.7
300	29.800	.35000	705.00	.4990-01	.6230-01	.6750-01	.9345	.3717-02	.2749-02	.4850	3.359	525.5
311	29.800	.35500	2090.0	.4030-01	.5020-01	.5430-01	.9345	.3009-02	.2231-02	.3980	2.647	526.2
311	29.800	.36500	2092.0	.4520-01	.5620-01	.6080-01	.9345	.3370-02	.2503-02	.4490	2.978	525.3
311	29.800	.37000	2093.0	.3930-01	.4880-01	.5270-01	.9345	.2917-02	.2179-02	.3980	2.649	522.3
302	29.800	.50000	707.00	.3840-01	.4760-01	.5150-01	.9345	.2839-02	.2116-02	.3820	2.647	521.1
302	29.800	.60000	708.00	.3820-01	.4720-01	.5100-01	.9345	.2812-02	.2105-02	.3850	2.488	518.7
302	29.800	.70000	709.00	.3780-01	.4670-01	.5040-01	.9345	.2778-02	.2083-02	.3830	2.477	517.7
302	29.800	.80000	710.00	.3540-01	.4380-01	.4730-01	.9345	.2609-02	.1954-02	.3570	2.258	518.6
302	29.800	.87000	711.00	.7000-03	.8000-03	.9000-03	.9345	.4894-04	.3992-04	.1000-01	.6600-01	452.0
311	31.430	.44000	2166.0	.4070-01	.5060-01	.5470-01	.9345	.3032-02	.2256-02	.4070	2.733	524.4
310	31.430	.47600	2005.0	.4200-01	.5190-01	.5600-01	.9345	.3105-02	.2327-02	.4290	2.887	520.4
310	31.430	.51100	2006.0	.3720-01	.4600-01	.4960-01	.9345	.2746-02	.2061-02	.3810	2.647	519.6
310	31.430	.54600	2007.0	.1990-01	.2420-01	.2600-01	.9345	.1442-02	.1100-02	.2140	1.533	509.8
310	31.430	.61600	2009.0	.3840-01	.4720-01	.5090-01	.9345	.2817-02	.2128-02	.4010	2.790	516.1
310	31.430	.65000	2010.0	.3540-01	.4350-01	.4680-01	.9345	.2594-02	.1959-02	.3690	2.606	516.2
310	31.430	.68600	2014.0	.3410-01	.4210-01	.4540-01	.9345	.2515-02	.1892-02	.3520	2.491	518.5
310	31.430	.72050	2015.0	.2690-01	.3300-01	.3550-01	.9345	.1966-02	.1492-02	.2860	2.154	513.2
310	31.430	.79040	2017.0	.3270-01	.4030-01	.4340-01	.9345	.2407-02	.1812-02	.3380	2.171	517.9
310	31.430	.86000	2019.0	.5400-02	.6800-02	.7300-02	.9345	.4054-03	.2992-03	.5300-01	.3430	528.6
310	31.430	.89520	2020.0	.3070-01	.3780-01	.4080-01	.9345	.2258-02	.1701-02	.3180	2.102	517.5
311	31.430	.92600	2153.0	.3450-01	.4260-01	.4600-01	.9345	.2546-02	.1913-02	.3550	2.626	519.1
310	33.750	.25000	2079.0	.3430-01	.4280-01	.4640-01	.9345	.2572-02	.1900-02	.3350	2.777	528.2
310	33.750	.30000	2080.0	.4780-01	.5980-01	.6490-01	.9345	.3595-02	.2651-02	.4660	3.096	528.8
310	33.750	.37500	2081.0	.4050-01	.4990-01	.5370-01	.9345	.2976-02	.2241-02	.4190	2.823	517.8
310	33.750	.40000	2082.0	.4400-01	.5440-01	.5870-01	.9345	.3251-02	.2440-02	.4510	3.040	519.6
310	33.750	.43000	2083.0	.4500-01	.5550-01	.5980-01	.9345	.3316-02	.2493-02	.4640	3.125	518.6
310	33.750	.45000	2084.0	.4120-01	.5080-01	.5480-01	.9345	.3036-02	.2281-02	.4230	2.852	519.0
310	33.750	.60000	2085.0	.3320-01	.4100-01	.4420-01	.9345	.2448-02	.1840-02	.3420	2.306	518.6
311	33.750	.65000	2086.0	.3660-01	.4530-01	.4890-01	.9345	.2708-02	.2026-02	.3710	2.521	521.3
311	33.750	.92600	2152.0	.3300-01	.4080-01	.4400-01	.9345	.2434-02	.1829-02	.3400	2.512	519.0
310	36.320	.25000	2066.0	.4290-01	.5290-01	.5710-01	.9345	.3164-02	.2376-02	.4410	2.957	519.2
310	36.320	.35000	2069.0	.4670-01	.5790-01	.6250-01	.9345	.3462-02	.2590-02	.4750	3.193	521.4
310	36.320	.37500	2070.0	.4230-01	.5210-01	.5620-01	.9345	.3111-02	.2341-02	.4370	2.943	518.1
310	36.320	.40000	2071.0	.4170-01	.5140-01	.5540-01	.9345	.3068-02	.2310-02	.4320	2.910	517.7
310	36.320	.42000	2072.0	.4380-01	.5410-01	.5840-01	.9345	.3233-02	.2429-02	.4510	3.034	519.1
310	36.320	.42500	2073.0	.4400-01	.5430-01	.5860-01	.9345	.3247-02	.2437-02	.4510	3.037	519.6
310	36.320	.43500	2075.0	.4190-01	.5180-01	.5580-01	.9345	.3094-02	.2323-02	.4300	2.899	519.3

IH72, EXTERNAL TANK CLEAN,

HU/HREF

(RVZT41)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
310	36.320	.45000	2076.0	.3660-01	.4430-01	.4750-01	.9345	.2630-02	.2028-02	.4090	2.776	503.0
310	36.320	.60000	2077.0	.3710-01	.4560-01	.4910-01	.9345	.2721-02	.2055-02	.3870	2.635	516.2
310	36.320	.65000	2078.0	.4260-01	.5250-01	.5660-01	.9345	.3134-02	.2360-02	.4410	3.065	517.7
302	37.700	.50000-01	715.00	.3283	.4416	.4248	.9557	.2342-01	.1810-01	2.475	16.00	564.7
302	37.700	.70000-01	716.00	.2591	.3404	.3399	.9502	.1874-01	.1429-01	2.098	14.26	554.6
302	37.700	.10000+00	717.00	.1844	.2349	.2434	.9436	.1342-01	.1017-01	1.659	10.81	538.3
302	37.700	.15000	718.00	.1067	.1340	.1437	.9368	.7923-02	.5882-02	1.012	7.469	529.5
302	37.700	.20000	719.00	.6350-01	.7850-01	.8460-01	.9345	.4667-02	.3501-02	.6430	4.400	517.7
302	37.700	.30000	720.00	.4210-01	.5260-01	.5710-01	.9345	.3146-02	.2322-02	.4070	2.942	526.1
300	37.700	.35000	721.00	.4330-01	.5390-01	.5830-01	.9345	.3209-02	.2384-02	.4260	2.988	523.3
300	37.700	.37500	722.00	.4100-01	.5080-01	.5490-01	.9345	.3022-02	.2257-02	.4100	2.878	520.5
300	37.700	.50000	723.00	.3870-01	.4790-01	.5170-01	.9345	.2845-02	.2130-02	.3890	2.728	519.2
300	37.700	.60000	724.00	.4030-01	.4970-01	.5360-01	.9345	.2951-02	.2217-02	.4100	2.661	517.2
300	37.700	.70000	725.00	.3890-01	.4840-01	.5230-01	.9345	.2879-02	.2143-02	.3850	2.480	522.3
300	37.700	.80000	726.00	.2530-01	.3120-01	.3370-01	.9345	.1853-02	.1391-02	.2570	1.638	517.5
300	37.700	.87000	727.00	.2970-01	.3680-01	.3970-01	.9345	.2184-02	.1634-02	.2990	1.937	519.3
300	37.700	.92600	728.00	.3420-01	.4240-01	.4580-01	.9345	.2520-02	.1884-02	.3430	2.532	519.8
301	39.000	.10000-01	993.00	.5295	.8065	.7096	.9631	.3918-01	.2924-01	2.980	21.12	598.0
301	39.000	.25000-01	994.00	.3834	.5318	.4862	.9621	.2685-01	.2117-01	2.656	17.82	574.5
310	45.000	.25000	2036.0	.2440-01	.3040-01	.3300-01	.9345	.1826-02	.1351-02	.2400	1.959	527.2
310	45.000	.32500	2038.0	.4610-01	.5730-01	.6190-01	.9345	.3431-02	.2556-02	.4620	3.202	523.7
310	45.000	.35000	2039.0	.4660-01	.5770-01	.6220-01	.9345	.3448-02	.2583-02	.4750	3.247	520.6
310	45.000	.37500	2040.0	.4610-01	.5690-01	.6140-01	.9345	.3399-02	.2557-02	.4760	3.255	518.5
310	45.000	.40000	2041.0	.4450-01	.5480-01	.5910-01	.9345	.3273-02	.2463-02	.4590	3.143	518.1
310	45.000	.43000	2044.0	.4280-01	.5270-01	.5680-01	.9345	.3146-02	.2373-02	.4460	3.051	516.8
310	45.000	.43500	2045.0	.4240-01	.5220-01	.5630-01	.9345	.3117-02	.2350-02	.4400	3.013	517.2
310	45.000	.44000	2046.0	.4270-01	.5250-01	.5660-01	.9345	.3135-02	.2366-02	.4450	3.047	516.5
310	45.000	.45000	2047.0	.4210-01	.5180-01	.5590-01	.9345	.3094-02	.2333-02	.4380	3.013	517.1
310	45.000	.47000	2048.0	.4340-01	.5350-01	.5770-01	.9345	.3198-02	.2405-02	.4470	3.107	518.6
310	45.000	.55000	2049.0	.3110-01	.3820-01	.4110-01	.9345	.2275-02	.1725-02	.3290	2.300	513.7
310	45.000	.60000	2050.0	.4270-01	.5270-01	.5680-01	.9345	.3146-02	.2367-02	.4420	3.021	518.1
310	45.000	.65000	2051.0	.4000-01	.4920-01	.5300-01	.9345	.2937-02	.2213-02	.4150	2.803	517.3
310	45.000	.75000	2052.0	.2060-01	.2520-01	.2710-01	.9345	.1499-02	.1142-02	.2220	1.435	510.6
310	45.000	.80000	2053.0	.2980-01	.3660-01	.3930-01	.9345	.2178-02	.1653-02	.3170	2.025	513.0
310	45.000	.83000	2054.0	.3060-01	.3760-01	.4050-01	.9345	.2242-02	.1696-02	.3220	2.049	515.0
310	45.000	.84000	2055.0	.3110-01	.3820-01	.4110-01	.9345	.2278-02	.1725-02	.3280	2.092	514.3
310	45.000	.85000	2056.0	.3100-01	.3800-01	.4090-01	.9345	.2264-02	.1715-02	.3270	2.110	514.2
310	45.000	.86000	2057.0	.3140-01	.3850-01	.4140-01	.9345	.2294-02	.1738-02	.3310	2.190	514.1
310	45.000	.87000	2058.0	.3360-01	.4120-01	.4430-01	.9345	.2457-02	.1861-02	.3540	2.397	514.4
310	45.000	.89000	2060.0	.3720-01	.4580-01	.4930-01	.9345	.2731-02	.2061-02	.3880	2.634	516.3
310	45.000	.90000	2061.0	.2630-01	.3210-01	.3440-01	.9345	.1908-02	.1456-02	.2830	1.933	510.1
310	45.000	.91000	2062.0	.2730-01	.3410-01	.3690-01	.9345	.2045-02	.1510-02	.2670	2.201	528.2
310	45.000	.92600	2063.0	.3460-01	.4250-01	.4570-01	.9345	.2535-02	.1920-02	.3650	2.622	514.4

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT41)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
310	45.000	.93500	2064.0	.4750-01	.5880-01	.6340-01	.9345	.3514-02	.2634-02	.4860	3.677	520.2
310	45.000	.94500	2065.0	.5700-01	.7050-01	.7610-01	.9345	.4214-02	.3158-02	.5810	3.912	520.5
300	180.00	.15000-01	2182.0	.4822	.8343	.6313	.9720	.3475-01	.2654-01	2.208	16.01	618.9
300	180.00	.20000-01	2183.0	.4188	.6397	.5236	.9710	.2882-01	.2305-01	2.343	17.32	600.4
300	180.00	.25000-01	2184.0	.4143	.5982	.5042	.9710	.2775-01	.2281-01	2.605	18.62	587.8
300	180.00	.30000-01	2185.0	.3965	.5779	.4854	.9708	.2672-01	.2183-01	2.441	17.31	590.2
300	180.00	.40000-01	737.00	.1973	.2442	.2257	.9672	.1243-01	.1086-01	1.987	13.14	519.1
300	180.00	.45000-01	738.00	.3828	.5225	.4695	.9654	.2584-01	.2107-01	2.766	18.10	570.8
300	180.00	.60000-01	739.00	.3293	.4422	.4124	.9605	.2270-01	.1812-01	2.491	16.59	564.6
300	180.00	.70000-01	740.00	.3131	.4171	.3974	.9575	.2187-01	.1724-01	2.427	16.29	561.3
300	180.00	.80000-01	741.00	.2720	.3582	.3479	.9547	.1915-01	.1497-01	2.183	15.80	556.2
300	180.00	.10000+00	742.00	.2439	.3157	.3164	.9496	.1742-01	.1343-01	2.073	13.85	547.6
300	180.00	.12500	743.00	.1869	.2394	.2472	.9444	.1361-01	.1029-01	1.648	12.01	541.8
300	180.00	.15000	744.00	.1567	.1982	.2089	.9403	.1150-01	.8623-02	1.445	10.11	534.5
300	180.00	.17500	745.00	.1100	.1373	.1465	.9374	.8064-02	.6057-02	1.070	8.129	525.4
300	180.00	.20000	746.00	.8720-01	.1081	.1162	.9355	.6395-02	.4800-02	.8710	6.317	520.5
300	180.00	.21500	747.00	.7740-01	.9780-01	.1063	.9349	.5849-02	.4261-02	.7180	5.010	533.5
300	180.00	.23000	748.00	.6530-01	.8250-01	.8990-01	.9345	.4947-02	.3593-02	.6030	4.486	534.2
300	180.00	.24000	749.00	.5220-01	.6640-01	.7250-01	.9345	.3990-02	.2873-02	.4720	3.576	537.8
300	180.00	.25000	750.00	.2920-01	.3670-01	.3990-01	.9345	.2199-02	.1608-02	.2750	2.243	531.0
300	180.00	.35000	752.00	.6310-01	.7890-01	.8560-01	.9345	.4709-02	.3475-02	.6100	3.893	526.6
300	180.00	.40000	753.00	.6610-01	.8220-01	.8890-01	.9345	.4893-02	.3637-02	.6520	4.242	522.9
300	180.00	.50000	754.00	.5980-01	.7440-01	.8060-01	.9345	.4434-02	.3289-02	.5860	3.876	524.0
300	180.00	.60000	755.00	.5560-01	.6900-01	.7460-01	.9345	.4104-02	.3061-02	.5530	3.594	521.2
300	180.00	.70000	756.00	.4920-01	.6110-01	.6600-01	.9345	.3633-02	.2711-02	.4910	3.284	520.9
300	180.00	.80000	757.00	.4640-01	.5740-01	.6200-01	.9345	.3410-02	.2555-02	.4690	2.979	518.6
300	180.00	.90000	758.00	.3130-01	.3870-01	.4180-01	.9345	.2300-02	.1724-02	.3170	2.078	518.4
300	235.00	.22000	759.00	.1091	.1423	.1543	.9372	.8494-02	.6008-02	.9050	6.718	551.4
300	235.00	.25000	760.00	.5800-01	.7480-01	.8150-01	.9357	.4488-02	.3190-02	.4980	3.904	545.9
300	235.00	.27000	761.00	.5300-01	.6840-01	.7460-01	.9357	.4105-02	.2916-02	.4550	3.385	546.1
300	235.00	.30000	762.00	.9490-01	.1227	.1339	.9357	.7368-02	.5225-02	.8110	4.875	546.9
300	235.00	.32000	763.00	.9650-01	.1243	.1354	.9357	.7455-02	.5311-02	.8340	4.937	545.1
300	235.00	.34000	764.00	.1027	.1315	.1430	.9357	.7872-02	.5655-02	.9070	5.395	541.7
300	235.00	.36000	765.00	.1006	.1288	.1400	.9357	.7705-02	.5539-02	.8900	5.364	541.4
300	235.00	.38000	766.00	.1002	.1281	.1392	.9357	.7661-02	.5517-02	.8900	5.428	540.7
302	247.00	.23000	768.00	.1119	.1460	.1589	.9368	.8760-02	.6168-02	.9250	6.864	551.5
302	247.00	.25000	769.00	.6540-01	.8370-01	.9080-01	.9360	.5008-02	.3606-02	.5780	4.509	541.2
302	247.00	.27000	770.00	.7680-01	.9980-01	.1089	.9360	.6006-02	.4236-02	.6450	4.700	549.1
302	247.00	.30000	772.00	.9620-01	.1240	.1350	.9360	.7442-02	.5306-02	.8300	5.077	545.0
302	247.00	.31000	773.00	.1024	.1317	.1432	.9360	.7897-02	.5645-02	.8880	5.393	544.1
302	247.00	.32000	774.00	.1026	.1317	.1431	.9360	.7889-02	.5656-02	.8970	5.405	542.8
302	247.00	.32500	775.00	.9930-01	.1275	.1385	.9360	.7636-02	.5475-02	.8680	5.244	542.9
302	247.00	.33000	776.00	.1033	.1326	.1441	.9360	.7948-02	.5695-02	.9020	5.462	543.1

IH72, EXTERNAL TANK CLEAN,

HU/HREF

(RVZT41)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
302	247.00	.33500	777.00	.1047	.1346	.1463	.9360	.8068-02	.5775-02	.9120	5.525	543.5
302	247.00	.34000	778.00	.1049	.1345	.1460	.9360	.8052-02	.5784-02	.9220	5.586	542.1
302	247.00	.34500	779.00	.1015	.1302	.1413	.9360	.7794-02	.5597-02	.8910	5.416	542.2
302	247.00	.35000	780.00	.1005	.1287	.1397	.9360	.7706-02	.5541-02	.8860	5.397	541.6
300	247.00	.35500	781.00	.1600-02	.1900-02	.2100-02	.9360	.1146-03	.8569-04	.1500-01	.9400-01	523.4
300	247.00	.36000	782.00	.1020	.1312	.1426	.9360	.7850-02	.5615-02	.8850	5.404	544.3
300	247.00	.36500	783.00	.1017	.1305	.1418	.9360	.7804-02	.5598-02	.8890	5.416	543.2
300	247.00	.37000	784.00	.9380-01	.1201	.1303	.9360	.7170-02	.5166-02	.8300	5.087	541.4
300	247.00	.37500	785.00	.1400-02	.1800-02	.1900-02	.9360	.1048-03	.7882-04	.1400-01	.8900-01	521.1
300	247.00	.38000	786.00	.1020	.1308	.1420	.9360	.7813-02	.5617-02	.8970	5.558	542.3
300	247.00	.39000	787.00	.1012	.1296	.1407	.9360	.7743-02	.5568-02	.8900	5.529	542.2
300	247.00	.40000	788.00	.1026	.1323	.1438	.9360	.7918-02	.5650-02	.8860	5.541	545.2
301	247.00	.50000	789.00	.1008	.1291	.1401	.9360	.7738-02	.5564-02	.8870	5.705	540.5
301	247.00	.60000	790.00	.9930-01	.1276	.1386	.9360	.7655-02	.5481-02	.8650	5.687	542.2
301	247.00	.70000	791.00	.9470-01	.1216	.1322	.9360	.7300-02	.5227-02	.8240	5.836	542.2
301	247.00	.90000	793.00	.6730-01	.8510-01	.9180-01	.9360	.5071-02	.3718-02	.6240	4.054	532.1
311	247.00	.92600	2144.0	.2850-01	.3700-01	.4040-01	.9360	.2237-02	.1577-02	.2410	1.683	551.8
311	247.00	.93000	2149.0	.3880-01	.5090-01	.5570-01	.9360	.3087-02	.2151-02	.3200	2.300	556.0
311	250.57	.92600	2143.0	.2880-01	.3750-01	.4090-01	.9361	.2267-02	.1593-02	.2410	1.681	553.3
311	250.57	.93000	2148.0	.4010-01	.5290-01	.5800-01	.9361	.3215-02	.2222-02	.3240	2.273	558.9
301	258.00	.27000	794.00	.8720-01	.1110	.1200	.9362	.6624-02	.4818-02	.7890	5.654	536.2
301	258.00	.29000	795.00	.7600-01	.9540-01	.1027	.9362	.5671-02	.4194-02	.7190	4.474	528.5
301	258.00	.30000	796.00	.1019	.1298	.1404	.9362	.7753-02	.5624-02	.9140	5.570	537.3
309	258.00	.32000	798.00	.1018	.1314	.1428	.9362	.7908-02	.5635-02	.8810	5.307	548.2
309	258.00	.32500	799.00	.1000-03	.1000-03	.1000-03	.9362	.6890-05	.6086-05	.2000-02	.1600-01	319.7
309	258.00	.34000	802.00	.1018	.1308	.1419	.9362	.7856-02	.5633-02	.8940	5.410	545.8
309	258.00	.34500	803.00	.1019	.1310	.1422	.9362	.7872-02	.5644-02	.8960	5.432	545.8
309	258.00	.35500	805.00	.1029	.1325	.1439	.9362	.7964-02	.5695-02	.8980	5.443	546.9
309	258.00	.36000	806.00	.1031	.1324	.1437	.9362	.7953-02	.5710-02	.9090	5.530	545.3
309	258.00	.36500	807.00	.1024	.1314	.1425	.9362	.7890-02	.5669-02	.9050	5.520	544.9
309	258.00	.37000	808.00	.1017	.1305	.1416	.9362	.7837-02	.5628-02	.8970	5.486	545.2
309	258.00	.37500	809.00	.1028	.1319	.1430	.9362	.7919-02	.5693-02	.9100	5.568	544.7
309	258.00	.38000	810.00	.1004	.1289	.1398	.9362	.7738-02	.5558-02	.8860	5.450	545.1
301	258.00	.40000	812.00	.1068	.1367	.1481	.9362	.8178-02	.5899-02	.9450	5.844	539.7
311	258.00	.93500	2151.0	.4720-01	.6240-01	.6840-01	.9362	.3788-02	.2617-02	.3800	2.669	559.3
301	270.00	.40000-01	985.00	.3862	.5296	.4232	.9839	.2337-01	.2133-01	2.756	17.72	570.7
301	270.00	.50000-01	986.00	.4559	.6351	.5138	.9800	.2837-01	.2518-01	3.123	19.90	575.9
301	270.00	.60000-01	987.00	.4042	.5561	.4642	.9764	.2563-01	.2232-01	2.861	18.60	571.8
301	270.00	.70000-01	988.00	.4126	.5691	.4852	.9728	.2679-01	.2278-01	2.899	19.23	572.7
301	270.00	.80000-01	989.00	.3675	.5025	.4399	.9694	.2429-01	.2029-01	2.643	18.51	569.7
301	270.00	.10000+00	990.00	.3289	.4357	.4019	.9630	.2219-01	.1816-01	2.594	16.83	557.1
301	270.00	.15000	991.00	.2218	.2876	.2881	.9497	.1591-01	.1225-01	1.874	13.76	546.9
301	270.00	.20000	992.00	.1632	.2054	.2159	.9406	.1192-01	.9011-02	1.534	10.46	529.7

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT41)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
301	270.00	.23000	813.00	.1200	.1555	.1684	.9371	.9297-02	.6627-02	1.015	7.383	546.7
301	270.00	.24000	814.00	.1026	.1328	.1445	.9363	.7980-02	.5664-02	.8700	7.040	546.3
301	270.00	.25000	815.00	.6840-01	.8640-01	.9300-01	.9363	.5137-02	.3778-02	.6360	5.058	531.5
301	270.00	.27000	816.00	.7750-01	.9810-01	.1058	.9363	.5841-02	.4282-02	.7150	5.120	532.9
301	270.00	.29000	817.00	.8720-01	.1092	.1172	.9363	.6473-02	.4817-02	.8390	5.270	525.7
301	270.00	.30000	818.00	.1054	.1327	.1429	.9363	.7889-02	.5820-02	.9890	6.096	530.0
301	270.00	.31000	819.00	.1088	.1374	.1481	.9363	.8177-02	.6008-02	1.010	6.168	531.8
301	270.00	.32000	820.00	.1079	.1362	.1468	.9363	.8107-02	.5956-02	1.000	6.093	531.9
301	270.00	.32500	821.00	.1087	.1375	.1483	.9363	.8191-02	.6002-02	1.001	6.077	533.1
301	270.00	.33000	822.00	.1058	.1337	.1441	.9363	.7960-02	.5845-02	.9810	5.974	532.1
301	270.00	.33500	823.00	.1060	.1339	.1443	.9363	.7968-02	.5856-02	.9850	6.014	531.8
301	270.00	.34500	825.00	.1145	.1446	.1558	.9363	.8605-02	.6321-02	1.061	6.464	532.0
301	270.00	.36000	828.00	.1058	.1339	.1444	.9363	.7975-02	.5843-02	.9750	5.916	533.1
301	270.00	.36500	829.00	.1189	.1507	.1626	.9363	.8982-02	.6566-02	1.088	6.621	534.2
301	270.00	.37000	830.00	.1004	.1286	.1393	.9363	.7692-02	.5545-02	.8850	5.384	540.3
301	270.00	.37500	831.00	.1066	.1365	.1478	.9363	.8163-02	.5889-02	.9420	5.765	539.9
301	270.00	.38000	832.00	.1053	.1349	.1462	.9363	.8072-02	.5815-02	.9270	5.668	540.5
301	270.00	.39000	833.00	.1075	.1378	.1493	.9363	.8246-02	.5938-02	.9460	5.845	540.7
301	270.00	.40000	834.00	.1033	.1325	.1436	.9363	.7929-02	.5705-02	.9070	5.621	540.9
301	270.00	.50000	835.00	.1120	.1449	.1576	.9363	.8700-02	.6182-02	.9520	6.020	545.9
301	270.00	.60000	836.00	.1027	.1333	.1451	.9363	.8014-02	.5670-02	.8640	5.755	547.5
301	270.00	.70000	837.00	.8920-01	.1157	.1259	.9363	.6950-02	.4928-02	.7550	5.316	546.7
301	270.00	.80000	838.00	.9610-01	.1242	.1350	.9363	.7456-02	.5307-02	.8210	5.105	545.2
301	270.00	.90000	839.00	.6300-01	.8040-01	.8700-01	.9363	.4802-02	.3481-02	.5640	3.624	537.8
311	270.00	.92600	2141.0	.2770-01	.3660-01	.4010-01	.9363	.2221-02	.1533-02	.2220	1.510	559.8
311	270.00	.93000	2146.0	.4020-01	.5360-01	.5900-01	.9363	.3266-02	.2228-02	.3150	2.205	563.4
311	270.00	.93500	2150.0	.5090-01	.6730-01	.7390-01	.9363	.4091-02	.2819-02	.4070	2.856	560.3
311	289.43	.92600	2140.0	.2940-01	.3870-01	.4230-01	.9361	.2345-02	.1631-02	.2410	1.678	556.8
311	289.43	.93000	2145.0	.3720-01	.4940-01	.5430-01	.9361	.3007-02	.2061-02	.2950	2.088	561.5
301	292.50	.23000	840.00	.1010	.1316	.1431	.9368	.7902-02	.5577-02	.8380	6.747	549.6
301	292.50	.25000	841.00	.6250-01	.7870-01	.8490-01	.9360	.4686-02	.3449-02	.5850	4.572	530.3
301	292.50	.30000	843.00	.1080	.1377	.1491	.9360	.8234-02	.5966-02	.9700	5.797	537.3
301	292.50	.35000	845.00	.1205	.1605	.1769	.9360	.9771-02	.6652-02	.9330	5.682	559.6
301	292.50	.37000	846.00	.1047	.1340	.1454	.9360	.8028-02	.5782-02	.9250	5.723	539.9
301	292.50	.40000	847.00	.1033	.1321	.1433	.9360	.7911-02	.5702-02	.9150	5.721	539.5
301	292.50	.45000	848.00	.1008	.1290	.1400	.9360	.7731-02	.5564-02	.8890	5.604	540.2
301	292.50	.50000	849.00	.1018	.1310	.1424	.9360	.7862-02	.5619-02	.8820	5.682	543.0
301	292.50	.60000	851.00	.9420-01	.1223	.1334	.9360	.7368-02	.5202-02	.7930	5.309	547.6
301	292.50	.65000	852.00	.9490-01	.1235	.1348	.9360	.7446-02	.5243-02	.7930	5.393	548.6
301	292.50	.70000	853.00	.9810-01	.1281	.1401	.9360	.7737-02	.5415-02	.8080	5.660	550.7
301	292.50	.75000	854.00	.6640-01	.8510-01	.9240-01	.9360	.5101-02	.3666-02	.5840	3.796	540.7
301	292.50	.80000	855.00	.8390-01	.1083	.1179	.9360	.6513-02	.4632-02	.7180	4.676	544.9
311	292.50	.82000	2129.0	.8920-01	.1162	.1268	.9360	.7026-02	.4942-02	.7510	4.590	552.7

IH72, EXTERNAL TANK CLEAN,

HU/HREF

(RVZT41)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
311	292.50	.83000	2130.0	.8690-01	.1134	.1240	.9360	.6868-02	.4816-02	.7260	4.473	553.8
311	292.50	.85000	2132.0	.8470-01	.1108	.1212	.9360	.6712-02	.4692-02	.7030	4.348	554.9
311	292.50	.86000	2133.0	.8330-01	.1090	.1193	.9360	.6605-02	.4613-02	.6900	4.243	555.2
311	292.50	.87000	2134.0	.8770-01	.1149	.1258	.9360	.6966-02	.4856-02	.7220	4.469	555.9
311	292.50	.88000	2135.0	.8780-01	.1152	.1261	.9360	.6987-02	.4863-02	.7210	4.459	556.4
311	292.50	.89000	2136.0	.8590-01	.1126	.1234	.9360	.6833-02	.4759-02	.7070	4.383	556.2
301	292.50	.90000	856.00	.6220-01	.7920-01	.8580-01	.9360	.4739-02	.3433-02	.5580	3.638	537.3
311	292.50	.92600	2138.0	.2890-01	.3780-01	.4140-01	.9360	.2293-02	.1598-02	.2380	1.657	555.8
311	292.50	.93000	2139.0	.3870-01	.5100-01	.5600-01	.9360	.3103-02	.2144-02	.3130	2.230	558.8
311	301.50	.82000	2116.0	.7670-01	.9950-01	.1087	.9358	.6020-02	.4249-02	.6540	3.998	550.8
311	301.50	.83000	2117.0	.7690-01	.9960-01	.1088	.9358	.6025-02	.4259-02	.6570	4.000	550.3
311	301.50	.83500	2118.0	.7980-01	.1034	.1129	.9358	.6255-02	.4418-02	.6800	4.105	550.7
311	301.50	.84000	2119.0	.7830-01	.1016	.1109	.9358	.6144-02	.4337-02	.6670	4.060	550.8
311	301.50	.85000	2120.0	.8290-01	.1075	.1173	.9358	.6497-02	.4594-02	.7100	4.331	550.2
311	301.50	.86000	2021.0	.7680-01	.1000+00	.1094	.9358	.6058-02	.4252-02	.6460	3.955	552.9
311	301.50	.87000	2122.0	.8130-01	.1057	.1155	.9358	.6398-02	.4501-02	.6870	4.197	552.1
311	301.50	.88000	2123.0	.8170-01	.1065	.1165	.9358	.6451-02	.4528-02	.6870	4.222	552.9
311	301.50	.89000	2124.0	.8090-01	.1051	.1148	.9358	.6361-02	.4481-02	.6860	4.254	551.6
311	301.50	.90000	2125.0	.5970-01	.7700-01	.8390-01	.9358	.4649-02	.3307-02	.5190	3.248	547.9
311	301.50	.92600	2127.0	.4170-01	.5440-01	.5950-01	.9358	.3296-02	.2312-02	.3500	2.188	553.1
311	301.50	.93500	2128.0	.5480-01	.7160-01	.7840-01	.9358	.4344-02	.3036-02	.4560	3.064	554.4
311	305.40	.82000	2113.0	.7880-01	.1020	.1114	.9357	.6171-02	.4364-02	.6760	4.112	549.8
311	305.40	.83000	2114.0	.7530-01	.9730-01	.1062	.9357	.5883-02	.4169-02	.6490	3.951	549.0
311	305.40	.83500	2115.0	.7700-01	.9970-01	.1088	.9357	.6029-02	.4264-02	.6600	4.052	549.8
301	305.40	.84000	857.00	.7730-01	.9910-01	.1078	.9357	.5955-02	.4268-02	.6780	4.204	541.0
309	305.40	.86000	859.00	.7510-01	.9680-01	.1056	.9357	.5844-02	.4155-02	.6520	4.082	547.7
309	305.40	.87000	860.00	.7620-01	.9860-01	.1076	.9357	.5958-02	.4220-02	.6560	4.115	549.2
309	305.40	.88000	861.00	.7690-01	.9930-01	.1083	.9357	.5998-02	.4257-02	.6650	4.173	548.4
309	305.40	.89000	862.00	.7760-01	.1002	.1094	.9357	.6054-02	.4299-02	.6720	4.243	548.2
309	305.40	.90000	863.00	.6640-01	.8540-01	.9300-01	.9357	.5148-02	.3673-02	.5810	3.695	546.3
309	305.40	.91000	864.00	.3710-01	.4700-01	.5090-01	.9357	.2821-02	.2055-02	.3430	2.506	537.6
309	305.40	.92600	865.00	.4100-01	.5280-01	.5750-01	.9357	.3185-02	.2271-02	.3580	2.597	546.7
309	309.30	.80000	866.00	.6000-02	.6600-02	.6900-02	.9356	.3801-03	.3307-03	.1150	.8030	355.3
309	309.30	.81000	867.00	.7090-01	.9160-01	.1000+00	.9356	.5538-02	.3926-02	.6130	3.824	548.5
309	309.30	.83000	869.00	.5750-01	.7360-01	.8010-01	.9356	.4435-02	.3181-02	.5110	3.207	543.9
309	315.00	.50000-01	871.00	.4196	.5827	.4880	.9749	.2702-01	.2323-01	2.924	18.39	578.7
309	315.00	.60000-01	872.00	.3972	.5483	.4716	.9714	.2611-01	.2199-01	2.810	18.38	576.7
301	315.00	.70000-01	873.00	.3771	.5177	.4568	.9679	.2522-01	.2083-01	2.685	18.04	571.0
301	315.00	.80000-01	874.00	.3297	.4459	.4042	.9646	.2232-01	.1821-01	2.445	17.11	565.6
301	315.00	.10000+00	875.00	.3081	.4088	.3870	.9586	.2137-01	.1702-01	2.419	15.79	557.8
301	315.00	.15000	876.00	.2061	.2680	.2738	.9465	.1512-01	.1138-01	1.724	12.61	548.4
301	315.00	.20000	877.00	.1355	.1709	.1816	.9386	.1003-01	.7481-02	1.264	8.594	530.9
301	315.00	.35000	878.00	.9790-01	.1248	.1357	.9354	.7493-02	.5404-02	.8770	5.477	537.6

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT41)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
301	315.00	.40000	879.00	.9300-01	.1186	.1290	.9354	.7121-02	.5135-02	.8330	5.304	537.7
301	315.00	.50000	880.00	.8140-01	.1040	.1131	.9354	.6248-02	.4494-02	.7240	4.991	538.8
301	315.00	.55000	881.00	.6220-01	.7870-01	.8530-01	.9354	.4711-02	.3434-02	.5740	3.847	532.9
301	315.00	.60000	882.00	.8080-01	.1038	.1132	.9354	.6249-02	.4465-02	.7080	4.769	541.4
301	315.00	.65000	883.00	.8010-01	.1031	.1126	.9354	.6216-02	.4421-02	.6930	4.736	543.2
301	315.00	.70000	884.00	.7850-01	.1007	.1098	.9354	.6063-02	.4334-02	.6870	4.898	541.3
301	315.00	.75000	885.00	.5750-01	.7300-01	.7920-01	.9354	.4375-02	.3177-02	.5250	3.330	534.6
301	315.00	.80000	886.00	.6950-01	.8860-01	.9640-01	.9354	.5321-02	.3836-02	.6220	3.927	537.8
301	315.00	.84000	887.00	.7060-01	.9000-01	.9790-01	.9354	.5406-02	.3897-02	.6320	3.989	537.8
309	315.00	.85000	888.00	.6620-01	.8490-01	.9260-01	.9354	.5126-02	.3663-02	.5850	3.708	545.0
309	315.00	.87000	890.00	.6760-01	.8680-01	.9460-01	.9354	.5240-02	.3741-02	.5960	3.790	545.3
309	315.00	.88000	891.00	.7020-01	.9020-01	.9850-01	.9354	.5453-02	.3885-02	.6160	3.937	546.1
309	315.00	.89000	892.00	.6900-01	.8860-01	.9660-01	.9354	.5346-02	.3820-02	.6090	3.967	545.0
309	315.00	.90000	893.00	.5980-01	.7670-01	.8360-01	.9354	.4629-02	.3311-02	.5290	3.488	544.6
309	315.00	.91000	894.00	.3000-01	.3790-01	.4100-01	.9354	.2272-02	.1662-02	.2820	2.069	534.9
309	315.00	.92600	895.00	.4080-01	.5240-01	.5710-01	.9354	.3163-02	.2260-02	.3600	2.621	545.1
309	322.30	.42000	897.00	.7960-01	.1018	.1110	.9351	.6147-02	.4408-02	.7120	4.588	543.0
309	322.30	.43500	898.00	.7020-01	.8950-01	.9750-01	.9351	.5400-02	.3885-02	.6330	3.966	541.6
309	322.30	.45000	899.00	.7970-01	.1019	.1112	.9351	.6154-02	.4410-02	.7110	4.662	543.3
309	322.30	.50000	900.00	.7540-01	.9720-01	.1064	.9351	.5890-02	.4175-02	.6550	4.362	547.6
309	322.30	.60000	901.00	.7600-01	.9760-01	.1066	.9351	.5900-02	.4206-02	.6700	4.450	545.3
309	322.30	.87000	904.00	-.4900-02	-.3500-02	-.3200-02	.9351	-.1774-03	-.2716-03	.2300-01	.1320	790.6
311	324.45	.41000	2110.0	.8970-01	.1149	.1254	.9351	.6946-02	.4971-02	.8000	5.049	543.7
311	324.45	.92600	2164.0	.3510-01	.4470-01	.4870-01	.9351	.2698-02	.1943-02	.3180	2.266	541.1
311	326.85	.40000	2107.0	.1000-03	.2000-03	.2000-03	.9350	.1121-04	.8241-05	.1000-02	.9000-02	531.8
311	326.85	.40500	2108.0	.7990-01	.1019	.1110	.9350	.6150-02	.4423-02	.7220	4.561	541.5
310	326.85	.44000	2021.0	.7310-01	.9280-01	.1010	.9350	.5594-02	.4050-02	.6720	4.291	538.7
310	326.85	.54600	2024.0	.2630-01	.3290-01	.3560-01	.9350	.1974-02	.1458-02	.2550	1.725	529.6
310	326.85	.58100	2025.0	.6760-01	.8650-01	.9440-01	.9350	.5230-02	.3743-02	.6030	4.226	543.5
310	326.85	.61600	2026.0	.6570-01	.8390-01	.9150-01	.9350	.5070-02	.3637-02	.5900	4.108	542.5
310	326.85	.65200	2027.0	.6860-01	.8750-01	.9540-01	.9350	.5286-02	.3800-02	.6190	4.313	541.8
310	326.85	.68600	2028.0	.6810-01	.8710-01	.9510-01	.9350	.5268-02	.3774-02	.6100	4.287	543.1
310	326.85	.72260	2029.0	.4060-01	.5150-01	.5590-01	.9350	.3098-02	.2252-02	.3780	2.647	537.0
310	326.85	.75790	2030.0	.3470-01	.4360-01	.4730-01	.9350	.2619-02	.1925-02	.3330	2.143	531.8
310	326.85	.79310	2031.0	.7060-01	.9000-01	.9810-01	.9350	.5436-02	.3910-02	.6380	4.011	541.4
310	326.85	.82830	2032.0	.7080-01	.9030-01	.9840-01	.9350	.5454-02	.3925-02	.6410	4.063	541.3
310	326.85	.86350	2033.0	.7140-01	.9080-01	.9880-01	.9350	.5476-02	.3957-02	.6530	4.110	539.5
310	326.85	.90000	2034.0	.7360-01	.9370-01	.1020	.9350	.5651-02	.4080-02	.6720	4.190	539.9
311	326.85	.92600	2163.0	.3430-01	.4370-01	.4760-01	.9350	.2636-02	.1902-02	.3130	2.231	540.1
310	326.85	.93390	2035.0	.4140-01	.5280-01	.5760-01	.9350	.3189-02	.2293-02	.3740	2.510	541.7
311	330.20	.40000	2104.0	.8310-01	.1061	.1157	.9349	.6409-02	.4602-02	.7490	4.732	541.9
311	330.20	.40500	2105.0	.8320-01	.1059	.1155	.9349	.6396-02	.4606-02	.7550	4.771	540.8
311	330.20	.41000	2106.0	.7770-01	.9910-01	.1081	.9349	.5990-02	.4304-02	.7010	4.418	541.7

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, EXTERNAL TANK CLEAN, HU/HREF

(RVZT41)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
309	330.20	.42000	905.00	.7760-01	.9840-01	.1071	.9349	.5929-02	.4297-02	.7160	4.637	537.9
309	330.20	.43500	906.00	.7480-01	.9520-01	.1037	.9349	.5744-02	.4140-02	.6800	4.426	540.3
309	330.20	.45000	907.00	.7300-01	.9320-01	.1017	.9349	.5628-02	.4040-02	.6570	4.296	541.9
309	330.20	.50000	908.00	.6590-01	.8460-01	.9260-01	.9349	.5126-02	.3646-02	.5790	4.145	545.7
309	330.20	.60000	909.00	.6840-01	.8770-01	.9590-01	.9349	.5308-02	.3789-02	.6070	3.979	544.2
309	330.20	.70000	910.00	.6480-01	.8330-01	.9120-01	.9349	.5049-02	.3590-02	.5700	3.843	545.8
309	330.20	.80000	911.00	.5520-01	.7040-01	.7670-01	.9349	.4247-02	.3055-02	.4990	3.209	541.2
309	330.20	.87000	912.00	.3050-01	.3830-01	.4160-01	.9349	.2302-02	.1689-02	.2910	1.873	532.3
311	330.20	.92600	2162.0	.2990-01	.3790-01	.4130-01	.9349	.2285-02	.1654-02	.2750	1.955	538.5
311	334.98	.92600	2161.0	.3250-01	.4110-01	.4470-01	.9348	.2476-02	.1799-02	.3020	2.145	536.7
309	334.98	.93500	913.00	.7170-01	.8970-01	.9710-01	.9348	.5374-02	.3971-02	.6990	5.130	528.5
309	334.98	.94500	914.00	.4560-01	.5640-01	.6080-01	.9348	.3363-02	.2527-02	.4670	3.405	519.9
309	337.50	.40000-01	915.00	.3831	.5267	.4487	.9732	.2484-01	.2121-01	2.742	17.13	575.3
309	337.50	.50000-01	916.00	.4022	.5522	.4819	.9696	.2668-01	.2227-01	2.888	18.36	574.9
309	337.50	.70000-01	918.00	.1738	.2146	.2023	.9629	.1120-01	.9621-02	1.781	12.56	519.4
309	337.50	.80000-01	919.00	.3171	.4238	.3975	.9598	.2201-01	.1755-01	2.455	16.60	564.7
309	337.50	.10000+00	920.00	.2643	.3446	.3359	.9542	.1860-01	.1463-01	2.212	14.73	553.3
309	337.50	.15000	921.00	.1818	.2336	.2427	.9434	.1344-01	.1006-01	1.599	11.59	545.7
309	337.50	.20000	922.00	.1225	.1540	.1651	.9369	.9139-02	.6781-02	1.168	7.837	532.3
309	337.50	.42000	923.00	.6810-01	.8620-01	.9380-01	.9347	.5195-02	.3769-02	.6320	4.141	537.0
311	337.50	.42500	2167.0	.7120-01	.9050-01	.9870-01	.9347	.5467-02	.3942-02	.6500	4.205	539.8
309	337.50	.43500	924.00	.7460-01	.9480-01	.1033	.9347	.5720-02	.4132-02	.6840	4.496	538.9
309	337.50	.85000	926.00	.5490-01	.6950-01	.7560-01	.9347	.4183-02	.3042-02	.5130	3.334	536.0
309	337.50	.86000	927.00	.5580-01	.7050-01	.7670-01	.9347	.4245-02	.3088-02	.5210	3.401	535.7
309	337.50	.87000	928.00	.5760-01	.7270-01	.7910-01	.9347	.4380-02	.3187-02	.5380	3.522	535.6
309	337.50	.88000	929.00	.4310-01	.5310-01	.5710-01	.9347	.3164-02	.2388-02	.4480	2.974	517.0
309	337.50	.89000	930.00	.5450-01	.6930-01	.7550-01	.9347	.4180-02	.3016-02	.4980	3.290	539.4
309	337.50	.90000	931.00	.4680-01	.5920-01	.6450-01	.9347	.3569-02	.2588-02	.4330	2.935	537.1
309	337.50	.91000	932.00	.2900-01	.3620-01	.3920-01	.9347	.2172-02	.1603-02	.2810	2.078	529.0
301	337.50	.92600	933.00	.3320-01	.4130-01	.4460-01	.9347	.2462-02	.1832-02	.3270	2.418	521.3
301	343.12	.41500	934.00	.7410-01	.9350-01	.1017	.9346	.5614-02	.4095-02	.6920	4.527	530.8
301	343.12	.42000	935.00	.7090-01	.8950-01	.9740-01	.9346	.5377-02	.3916-02	.6590	4.348	531.5
301	343.12	.42500	936.00	.6600-01	.8310-01	.9040-01	.9346	.4990-02	.3644-02	.6180	4.090	530.3
301	343.12	.44500	939.00	.6340-01	.7990-01	.8680-01	.9346	.4795-02	.3501-02	.5940	3.976	530.3
301	343.12	.45000	940.00	.6350-01	.8000-01	.8700-01	.9346	.4805-02	.3506-02	.5930	3.972	530.7
301	343.12	.50000	941.00	.6410-01	.8090-01	.8800-01	.9346	.4862-02	.3540-02	.5960	4.073	531.6
301	343.12	.60000	942.00	.6550-01	.8290-01	.9020-01	.9346	.4981-02	.3620-02	.6060	3.936	532.5
301	343.12	.80000	944.00	.5190-01	.6550-01	.7120-01	.9346	.3931-02	.2867-02	.4850	3.188	530.9
311	345.56	.42500	2168.0	.6680-01	.8470-01	.9230-01	.9346	.5114-02	.3699-02	.6160	3.993	538.0
311	345.56	.92600	2160.0	.3460-01	.4340-01	.4710-01	.9346	.2608-02	.1915-02	.3320	2.362	531.3
301	348.00	.35000	945.00	.7110-01	.8930-01	.9700-01	.9346	.5356-02	.3926-02	.6730	4.307	528.4
301	348.00	.36000	946.00	.7130-01	.8970-01	.9740-01	.9346	.5378-02	.3938-02	.6740	4.323	528.8
301	348.00	.37000	947.00	.6820-01	.8550-01	.9290-01	.9346	.5128-02	.3764-02	.6480	4.170	527.8

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT41)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
309	348.00	.37500	948.00	.6700-01	.8460-01	.9210-01	.9346	.5101-02	.3708-02	.6260	4.014	535.7
309	348.00	.38000	949.00	.6680-01	.8440-01	.9190-01	.9346	.5088-02	.3697-02	.6230	4.030	535.9
309	348.00	.38500	950.00	.6670-01	.8430-01	.9180-01	.9346	.5083-02	.3695-02	.6240	4.046	535.7
309	348.00	.39000	951.00	.6890-01	.8710-01	.9480-01	.9346	.5249-02	.3817-02	.6450	4.208	535.5
309	348.00	.39500	952.00	.6520-01	.8230-01	.8950-01	.9346	.4957-02	.3608-02	.6110	3.932	535.1
309	348.00	.40000	953.00	.6490-01	.8190-01	.8910-01	.9346	.4935-02	.3594-02	.6100	3.991	534.9
309	348.00	.41000	955.00	.6890-01	.8720-01	.9490-01	.9346	.5254-02	.3817-02	.6440	4.222	535.9
309	348.00	.42000	957.00	.6580-01	.8320-01	.9060-01	.9346	.5016-02	.3643-02	.6140	4.050	536.0
309	348.00	.42500	958.00	.6860-01	.8680-01	.9450-01	.9346	.5234-02	.3796-02	.6370	4.201	536.7
309	348.00	.43000	959.00	.6150-01	.7760-01	.8450-01	.9346	.4676-02	.3403-02	.5760	3.791	535.2
309	348.00	.44000	960.00	.5960-01	.7520-01	.8180-01	.9346	.4527-02	.3298-02	.5600	3.699	534.7
309	348.00	.44500	961.00	.6180-01	.7810-01	.8500-01	.9346	.4706-02	.3419-02	.5760	3.803	535.9
309	348.00	.85000	968.00	.5000-01	.6290-01	.6830-01	.9346	.3780-02	.2769-02	.4770	3.119	532.1
309	348.00	.86000	969.00	.5130-01	.6460-01	.7030-01	.9346	.3891-02	.2839-02	.4840	3.169	534.0
310	348.00	.91000	974.00	.3080-01	.3810-01	.4110-01	.9346	.2277-02	.1705-02	.3130	2.311	521.2
311	352.20	.93700	2089.0	.3580-01	.4690-01	.5190-01	.9345	.2877-02	.1983-02	.2950	2.051	556.2
311	354.00	.42500	2169.0	.6230-01	.7870-01	.8570-01	.9345	.4745-02	.3449-02	.5830	3.778	535.7
311	354.00	.43000	2174.0	.6260-01	.7920-01	.8620-01	.9345	.4776-02	.3468-02	.5840	3.788	536.2
311	354.00	.43500	2177.0	.6210-01	.7830-01	.8520-01	.9345	.4719-02	.3441-02	.5860	3.804	534.3
311	354.00	.44000	2179.0	.5890-01	.7440-01	.8100-01	.9345	.4489-02	.3264-02	.5520	3.580	535.6
311	355.16	.92600	2158.0	.3150-01	.3940-01	.4270-01	.9345	.2363-02	.1746-02	.3090	2.236	528.0

IH72, EXTERNAL TANK CLEAN, HU/HREF

(RVZT42)

EXTERNAL TANK

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
297	.4000-01	.0000	3.010	36.70	701.0	249.3	.9850	6.246	2329.	.3315-03	.1995-06	3.870
298	.2000-01	.0000	3.010	36.70	702.0	249.5	.9850	6.249	2330.	.3313-03	.1997-06	3.866
299	.2000-01	.0000	3.010	36.70	702.0	249.6	.9850	6.249	2330.	.3313-03	.1997-06	3.865
306	-.4000-01	.0000	3.010	37.20	705.0	250.6	.9970	6.325	2335.	.3339-03	.2005-06	3.889
307	-.4000-01	.0000	3.010	37.20	705.0	250.5	.9970	6.321	2335.	.3337-03	.2004-06	3.887
308	-.4000-01	.0000	3.010	37.10	705.0	250.6	.9940	6.306	2335.	.3329-03	.2005-06	3.877

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
297	.5511-01	.9222-02
298	.5513-01	.9226-02
299	.5513-01	.9227-02
306	.5549-01	.9195-02
307	.5548-01	.9197-02
308	.5541-01	.9209-02

TEST DATA

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
298	.00000	.25000-01	2187.0	.5545	.7723	.6585	.9720	.3630-01	.3057-01	3.803	26.45	577.3
297	.00000	.50000-01	601.00	.4579	.5975	.5489	.9645	.3025-01	.2523-01	3.785	24.36	550.9
297	.00000	.70000-01	603.00	.3519	.4521	.4323	.9581	.2382-01	.1939-01	3.065	20.95	542.9
297	.00000	.80000-01	604.00	.3418	.4364	.4243	.9552	.2338-01	.1883-01	3.043	19.87	539.4
297	.00000	.15000	606.00	.1624	.2014	.2111	.9404	.1163-01	.8950-02	1.621	11.95	519.8
297	.00000	.20000	607.00	.1039	.1275	.1365	.9355	.7522-02	.5725-02	1.083	7.195	511.7
297	.00000	.21000	608.00	.8620-01	.1076	.1163	.9350	.6411-02	.4748-02	.8340	5.822	525.4
297	.00000	.22000	609.00	.7280-01	.9070-01	.9810-01	.9347	.5405-02	.4011-02	.7110	5.357	523.6
297	.00000	.30000	610.00	.6490-01	.8080-01	.8750-01	.9345	.4820-02	.3577-02	.6370	4.411	522.9
297	.00000	.36000	612.00	.6000-01	.7450-01	.8050-01	.9345	.4437-02	.3307-02	.5960	4.060	520.7
297	.00000	.37500	614.00	.6450-01	.8010-01	.8660-01	.9345	.4773-02	.3554-02	.6390	4.353	521.1
299	.00000	.38000	615.00	.6330-01	.7900-01	.8560-01	.9345	.4718-02	.3492-02	.6180	4.201	524.8

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT42)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
299	.00000	.38500	616.00	.6230-01	.7770-01	.8420-01	.9345	.4639-02	.3436-02	.6090	4.137	524.6
299	.00000	.39000	617.00	.9000-03	.1200-02	.1300-02	.9345	.6899-04	.5122-04	.9000-02	.6200-01	523.3
299	.00000	.39500	618.00	.5470-01	.6820-01	.7380-01	.9345	.4070-02	.3014-02	.5340	3.642	524.5
299	.00000	.40000	619.00	.6330-01	.7900-01	.8560-01	.9345	.4717-02	.3492-02	.6180	4.189	524.7
299	.00000	.40500	620.00	.6590-01	.8170-01	.8820-01	.9345	.4862-02	.3635-02	.6620	4.514	519.6
299	.00000	.41000	621.00	.6820-01	.8460-01	.9140-01	.9345	.5040-02	.3761-02	.6810	4.638	520.7
299	.00000	.41500	622.00	.7020-01	.8720-01	.9430-01	.9345	.5197-02	.3872-02	.6980	4.738	521.5
299	.00000	.43000	625.00	.6800-01	.8430-01	.9100-01	.9345	.5016-02	.3750-02	.6830	4.655	519.6
299	.00000	.44000	626.00	.6540-01	.8100-01	.8740-01	.9345	.4819-02	.3605-02	.6580	4.486	519.2
299	.00000	.44500	627.00	.6500-01	.8050-01	.8690-01	.9345	.4792-02	.3583-02	.6530	4.491	519.5
299	.00000	.45000	628.00	.6280-01	.7780-01	.8400-01	.9345	.4628-02	.3463-02	.6320	4.347	519.2
299	.00000	.45500	629.00	.6430-01	.7970-01	.8610-01	.9345	.4745-02	.3547-02	.6450	4.506	519.8
297	.00000	.46000	630.00	.6250-01	.7780-01	.8420-01	.9345	.4639-02	.3446-02	.6150	4.184	522.5
297	.00000	.47000	631.00	.6330-01	.7880-01	.8530-01	.9345	.4700-02	.3488-02	.6210	4.224	522.9
297	.00000	.48000	632.00	.6260-01	.7820-01	.8470-01	.9345	.4668-02	.3448-02	.6060	4.139	525.3
297	.00000	.49000	633.00	.6080-01	.7580-01	.8200-01	.9345	.4521-02	.3350-02	.5940	4.099	523.7
297	.00000	.50000	634.00	.5660-01	.7050-01	.7630-01	.9345	.4206-02	.3118-02	.5540	3.921	523.3
297	.00000	.55000	635.00	.5280-01	.6560-01	.7100-01	.9345	.3911-02	.2908-02	.5200	3.500	521.9
297	.00000	.60000	636.00	.6880-01	.8590-01	.9310-01	.9345	.5130-02	.3792-02	.6680	4.353	524.9
297	.00000	.65000	637.00	.7420-01	.9260-01	.1002	.9345	.5524-02	.4090-02	.7230	4.732	524.1
297	.00000	.70000	638.00	.6790-01	.8500-01	.9210-01	.9345	.5078-02	.3744-02	.6540	4.527	526.1
297	.00000	.75000	639.00	.5130-01	.6400-01	.6940-01	.9345	.3823-02	.2828-02	.4990	3.256	524.4
297	.00000	.80000	640.00	.6440-01	.8050-01	.8720-01	.9345	.4808-02	.3549-02	.6220	3.941	525.6
297	.00000	.85000	641.00	.6370-01	.7960-01	.8630-01	.9345	.4754-02	.3508-02	.6150	3.928	525.7
297	.00000	.87000	643.00	.6250-01	.7830-01	.8490-01	.9345	.4681-02	.3445-02	.5990	3.901	527.1
297	.00000	.88000	644.00	.6280-01	.7870-01	.8550-01	.9345	.4710-02	.3460-02	.5990	3.933	527.9
299	.00000	.89000	645.00	.6160-01	.7780-01	.8470-01	.9345	.4668-02	.3398-02	.5740	3.806	532.8
299	.00000	.92600	648.00	.3580-01	.4500-01	.4900-01	.9345	.2700-02	.1972-02	.3360	2.472	531.2
299	.00000	.95000	649.00	.5560-01	.6920-01	.7490-01	.9345	.4130-02	.3064-02	.5460	4.028	523.7
308	5.6250	.42500	2170.0	.6780-01	.8420-01	.9110-01	.9345	.5046-02	.3756-02	.6790	4.465	524.1
308	5.6250	.43500	2178.0	.5780-01	.7170-01	.7740-01	.9345	.4291-02	.3202-02	.5830	3.836	522.8
299	11.250	.35000	650.00	.6590-01	.8250-01	.8940-01	.9345	.4931-02	.3636-02	.6360	4.319	526.8
299	11.250	.36000	651.00	.9000-03	.1100-02	.1200-02	.9345	.6510-04	.4803-04	.8000-02	.5700-01	526.4
299	11.250	.37000	652.00	.7050-01	.8810-01	.9550-01	.9345	.5266-02	.3887-02	.6830	4.637	526.1
299	11.250	.38000	654.00	.6270-01	.7820-01	.8470-01	.9345	.4669-02	.3455-02	.6100	4.160	525.1
299	11.250	.39500	657.00	.6710-01	.8370-01	.9060-01	.9345	.4995-02	.3697-02	.6540	4.459	524.8
299	11.250	.40500	659.00	.6650-01	.8300-01	.8990-01	.9345	.4958-02	.3668-02	.6480	4.431	525.1
299	11.250	.41000	660.00	.6790-01	.8470-01	.9180-01	.9345	.5060-02	.3743-02	.6610	4.507	525.1
299	11.250	.41500	661.00	.6640-01	.8270-01	.8950-01	.9345	.4934-02	.3659-02	.6510	4.426	523.9
299	11.250	.42000	662.00	.6840-01	.8530-01	.9250-01	.9345	.5097-02	.3769-02	.6650	4.530	525.4
299	11.250	.42500	663.00	.6640-01	.8290-01	.8980-01	.9345	.4950-02	.3662-02	.6470	4.421	525.2
299	11.250	.43000	664.00	.6440-01	.8020-01	.8690-01	.9345	.4788-02	.3553-02	.6330	4.370	523.6
299	11.250	.44000	665.00	.6180-01	.7700-01	.8330-01	.9345	.4594-02	.3408-02	.6070	4.163	523.7

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT42)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
299	11.250	.45000	666.00	.5980-01	.7450-01	.8070-01	.9345	.4449-02	.3296-02	.5850	4.011	524.4
299	11.250	.45500	667.00	.6080-01	.7580-01	.8220-01	.9345	.4529-02	.3350-02	.5920	4.058	525.1
299	11.250	.46000	668.00	.6260-01	.7810-01	.8450-01	.9345	.4661-02	.3449-02	.6100	4.194	525.0
299	11.250	.47000	669.00	.6050-01	.7550-01	.8180-01	.9345	.4512-02	.3334-02	.5870	4.051	525.6
299	11.250	.48000	670.00	.5740-01	.7190-01	.7800-01	.9345	.4301-02	.3163-02	.5500	3.787	528.0
299	11.250	.49000	671.00	.6090-01	.7640-01	.8300-01	.9345	.4577-02	.3356-02	.5780	3.971	529.4
299	11.250	.50000	672.00	.5470-01	.6870-01	.7470-01	.9345	.4116-02	.3014-02	.5180	3.630	530.0
299	11.250	.70000	674.00	.5570-01	.7010-01	.7620-01	.9345	.4202-02	.3068-02	.5230	3.585	531.3
299	11.250	.85000	676.00	.6330-01	.7930-01	.8600-01	.9345	.4741-02	.3491-02	.6090	3.908	527.4
299	11.250	.86000	677.00	.6480-01	.8120-01	.8810-01	.9345	.4855-02	.3571-02	.6200	4.003	528.0
299	11.250	.87000	678.00	.6460-01	.8110-01	.8810-01	.9345	.4856-02	.3564-02	.6160	4.005	529.0
299	11.250	.88000	679.00	.6370-01	.8010-01	.8710-01	.9345	.4800-02	.3510-02	.6000	3.949	530.7
299	11.250	.90000	681.00	.5180-01	.6520-01	.7090-01	.9345	.3910-02	.2856-02	.4870	3.310	531.2
299	11.250	.91000	682.00	.2930-01	.3670-01	.3970-01	.9345	.2191-02	.1617-02	.2830	2.089	526.4
299	11.250	.92600	683.00	.4150-01	.5220-01	.5680-01	.9345	.3129-02	.2287-02	.3910	2.882	531.0
299	11.250	.95000	684.00	.5620-01	.7010-01	.7590-01	.9345	.4185-02	.3098-02	.5490	4.008	524.7
299	17.000	.33000	685.00	.6730-01	.8420-01	.9130-01	.9345	.5034-02	.3708-02	.6470	4.390	527.3
299	17.000	.34000	686.00	.6650-01	.8310-01	.9010-01	.9345	.4967-02	.3664-02	.6420	4.361	526.5
299	17.000	.35000	687.00	.6570-01	.8200-01	.8890-01	.9345	.4900-02	.3623-02	.6390	4.342	525.4
308	17.000	.35500	2102.0	.6720-01	.8310-01	.8970-01	.9345	.4970-02	.3722-02	.6840	4.534	521.0
299	17.000	.36000	688.00	.6520-01	.8130-01	.8810-01	.9345	.4855-02	.3593-02	.6360	4.319	524.9
299	17.000	.37000	689.00	.6540-01	.8160-01	.8840-01	.9345	.4875-02	.3603-02	.6350	4.313	525.6
299	17.000	.37500	690.00	.6490-01	.8100-01	.8770-01	.9345	.4836-02	.3579-02	.6330	4.312	525.0
308	17.000	.42500	2171.0	.6680-01	.8280-01	.8940-01	.9345	.4956-02	.3704-02	.6770	4.396	521.9
308	17.000	.43000	2176.0	.6430-01	.7970-01	.8600-01	.9345	.4768-02	.3566-02	.6530	4.301	521.6
297	17.000	.50000	691.00	.6660-01	.8250-01	.8910-01	.9345	.4910-02	.3670-02	.6670	4.548	519.1
297	17.000	.60000	692.00	.6710-01	.8310-01	.8980-01	.9345	.4946-02	.3700-02	.6740	4.410	518.7
297	17.000	.70000	693.00	.6710-01	.8360-01	.9050-01	.9345	.4989-02	.3697-02	.6560	4.501	523.6
297	17.000	.80000	694.00	.6250-01	.7780-01	.8420-01	.9345	.4641-02	.3446-02	.6150	3.913	522.5
297	17.000	.92600	696.00	.3690-01	.4600-01	.4980-01	.9345	.2744-02	.2035-02	.3620	2.679	523.2
308	20.980	.35500	2098.0	.6070-01	.7470-01	.8040-01	.9345	.4456-02	.3361-02	.6320	4.259	516.8
308	20.980	.36000	2099.0	.6390-01	.7890-01	.8500-01	.9345	.4713-02	.3541-02	.6580	4.390	519.0
308	20.980	.36500	2100.0	.6130-01	.7560-01	.8140-01	.9345	.4511-02	.3398-02	.6360	4.247	517.6
308	23.070	.35500	2094.0	-.2770-01	-.2210-01	-.2090-01	.9345	-.1156-02	-.1532-02	.2170	1.242	846.5
308	23.070	.36000	2095.0	.6230-01	.7680-01	.8280-01	.9345	.4588-02	.3452-02	.6430	4.296	518.4
307	23.070	.43500	2000.0	.6910-01	.8570-01	.9250-01	.9345	.5133-02	.3833-02	.6980	4.531	522.4
307	23.070	.56890	2001.0	.5790-01	.7220-01	.7830-01	.9345	.4342-02	.3210-02	.5680	3.928	527.5
307	23.070	.70270	2002.0	.5960-01	.7420-01	.8030-01	.9345	.4452-02	.3306-02	.5930	4.273	525.2
307	23.070	.83500	2003.0	.6480-01	.8050-01	.8700-01	.9345	.4829-02	.3597-02	.6510	4.184	523.7
307	23.070	.90000	2004.0	.5790-01	.7210-01	.7810-01	.9345	.4334-02	.3210-02	.5710	3.877	526.6
308	23.070	.92600	2154.0	.3990-01	.4940-01	.5340-01	.9345	.2957-02	.2209-02	.4030	2.908	522.4
297	29.800	.70000-01	700.00	.3418	.4363	.4177	.9581	.2302-01	.1884-01	3.048	20.69	539.1
297	29.800	.10000+00	701.00	.2692	.3373	.3374	.9500	.1859-01	.1483-01	2.572	16.56	527.5

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT42)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
297	29.800	.15000	702.00	.1520	.1879	.1968	.9404	.1084-01	.8378-02	1.538	11.17	517.4
297	29.800	.20000	703.00	.9220-01	.1126	.1203	.9355	.6632-02	.5079-02	.9800	6.659	508.0
297	29.800	.30000	704.00	.6550-01	.8140-01	.8800-01	.9345	.4850-02	.3611-02	.6490	4.657	521.2
297	29.800	.35000	705.00	.6250-01	.7730-01	.8350-01	.9345	.4600-02	.3442-02	.6280	4.359	518.6
308	29.800	.35500	2090.0	.6540-01	.8070-01	.8700-01	.9345	.4823-02	.3623-02	.6720	4.486	519.2
308	29.800	.36500	2092.0	.6500-01	.8020-01	.8640-01	.9345	.4789-02	.3602-02	.6710	4.469	518.4
308	29.800	.37000	2093.0	.5630-01	.6920-01	.7450-01	.9345	.4126-02	.3121-02	.5910	3.955	515.3
299	29.800	.50000	707.00	.6020-01	.7560-01	.8220-01	.9345	.4529-02	.3319-02	.5710	3.940	529.8
299	29.800	.60000	708.00	.6530-01	.8150-01	.8830-01	.9345	.4865-02	.3600-02	.6370	4.103	525.0
299	29.800	.70000	709.00	.6740-01	.8410-01	.9110-01	.9345	.5024-02	.3714-02	.6550	4.221	525.4
299	29.800	.80000	710.00	.6830-01	.8500-01	.9190-01	.9345	.5067-02	.3767-02	.6750	4.259	522.6
308	31.430	.44000	2166.0	.6340-01	.7840-01	.8460-01	.9345	.4686-02	.3512-02	.6470	4.356	520.5
307	31.430	.47600	2005.0	.6570-01	.8150-01	.8810-01	.9345	.4887-02	.3644-02	.6610	4.446	523.0
307	31.430	.51100	2006.0	.6210-01	.7750-01	.8390-01	.9345	.4654-02	.3446-02	.6120	4.234	526.8
307	31.430	.54600	2007.0	.3740-01	.4620-01	.4980-01	.9345	.2762-02	.2075-02	.3850	2.741	519.0
307	31.430	.61600	2009.0	.1840-01	.2290-01	.2480-01	.9345	.1377-02	.1022-02	.1830	1.269	525.2
307	31.430	.65000	2010.0	.6480-01	.8010-01	.8640-01	.9345	.4794-02	.3596-02	.6640	4.677	519.9
307	31.430	.68600	2014.0	.6150-01	.7620-01	.8240-01	.9345	.4570-02	.3410-02	.6200	4.379	522.6
307	31.430	.72050	2015.0	.4180-01	.5170-01	.5580-01	.9345	.3096-02	.2319-02	.4260	3.202	520.7
307	31.430	.75570	2016.0	.1000-03	.1000-03	.1000-03	.9345	.7768-05	.5706-05	.1000-02	.6000-02	530.7
307	31.430	.79040	2017.0	.6610-01	.8190-01	.8840-01	.9345	.4905-02	.3669-02	.6720	4.304	521.3
307	31.430	.86000	2019.0	.1080-01	.1360-01	.1470-01	.9345	.8174-03	.6003-03	.1040	.6780	530.8
307	31.430	.89520	2020.0	.6330-01	.7860-01	.8500-01	.9345	.4713-02	.3512-02	.6360	4.185	523.5
308	31.430	.92600	2153.0	.4030-01	.4970-01	.5360-01	.9345	.2969-02	.2233-02	.4160	3.078	518.5
307	33.750	.25000	2079.0	.5250-01	.6570-01	.7120-01	.9345	.3952-02	.2914-02	.5120	4.242	528.8
307	33.750	.30000	2080.0	.6990-01	.8750-01	.9480-01	.9345	.5262-02	.3879-02	.6810	4.522	529.0
307	33.750	.37500	2081.0	.6210-01	.7650-01	.8240-01	.9345	.4573-02	.3443-02	.6430	4.333	517.8
307	33.750	.40000	2082.0	.6120-01	.7570-01	.8170-01	.9345	.4533-02	.3393-02	.6230	4.189	521.0
307	33.750	.43000	2083.0	.6630-01	.8210-01	.8860-01	.9345	.4913-02	.3681-02	.6770	4.558	520.5
307	33.750	.60000	2085.0	.5860-01	.7250-01	.7830-01	.9345	.4343-02	.3250-02	.5960	4.009	521.2
308	33.750	.65000	2086.0	.6170-01	.7620-01	.8220-01	.9345	.4554-02	.3417-02	.6320	4.290	519.9
308	33.750	.92600	2152.0	.3790-01	.4670-01	.5030-01	.9345	.2788-02	.2099-02	.3920	2.904	517.8
307	36.320	.25000	2066.0	.6510-01	.8060-01	.8700-01	.9345	.4826-02	.3612-02	.6630	4.459	521.1
307	36.320	.35000	2069.0	.6730-01	.8320-01	.8980-01	.9345	.4983-02	.3733-02	.6870	4.621	520.6
307	36.320	.37500	2070.0	.6410-01	.7910-01	.8530-01	.9345	.4732-02	.3556-02	.6610	4.451	518.7
307	36.320	.40000	2071.0	.6370-01	.7870-01	.8480-01	.9345	.4707-02	.3536-02	.6560	4.416	519.1
307	36.320	.42000	2072.0	.6610-01	.8180-01	.8830-01	.9345	.4898-02	.3667-02	.6730	4.528	521.0
307	36.320	.42500	2073.0	.6300-01	.7810-01	.8430-01	.9345	.4675-02	.3497-02	.6400	4.308	521.4
307	36.320	.43500	2075.0	.6430-01	.7970-01	.8600-01	.9345	.4771-02	.3569-02	.6530	4.395	521.4
307	36.320	.45000	2076.0	.6120-01	.7420-01	.7940-01	.9345	.4404-02	.3394-02	.6830	4.639	503.2
307	36.320	.60000	2077.0	.6130-01	.7570-01	.8170-01	.9345	.4532-02	.3403-02	.6300	4.284	519.3
307	36.320	.65000	2078.0	.6540-01	.8080-01	.8720-01	.9345	.4838-02	.3629-02	.6700	4.653	519.8
299	37.700	.50000-01	715.00	.4166	.5490	.5025	.9645	.2771-01	.2297-01	3.341	21.69	556.3

IH72. EXTERNAL TANK CLEAN.

(RVZT42)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H/HREF H(TAW) BTU/R FT2SEC	H/HREF H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
299	37.700	.70000-01	716.00	.3414	.4399	.4202	.9581	.2317-01	.1882-01	2.949	20.14	545.1
299	37.700	.10000+00	717.00	.2492	.3133	.3134	.9500	.1727-01	.1374-01	2.356	15.41	530.3
299	37.700	.15000	718.00	.1501	.1867	.1958	.9405	.1080-01	.8275-02	1.481	10.97	522.8
299	37.700	.20000	719.00	.8720-01	.1072	.1148	.9355	.6328-02	.4807-02	.9050	6.202	513.6
299	37.700	.30000	720.00	.6290-01	.7920-01	.8610-01	.9345	.4744-02	.3470-02	.5940	4.282	530.6
297	37.700	.35000	721.00	.6750-01	.8350-01	.9010-01	.9345	.4966-02	.3722-02	.6820	4.795	517.8
297	37.700	.37500	722.00	.6380-01	.7880-01	.8490-01	.9345	.4681-02	.3515-02	.6480	4.558	516.6
297	37.700	.50000	723.00	.6640-01	.8180-01	.8810-01	.9345	.4856-02	.3659-02	.6810	4.784	514.7
297	37.700	.60000	724.00	.6660-01	.8190-01	.8820-01	.9345	.4863-02	.3668-02	.6850	4.453	514.1
297	37.700	.70000	725.00	.6840-01	.8470-01	.9150-01	.9345	.5044-02	.3768-02	.6840	4.406	519.5
297	37.700	.80000	726.00	.6510-01	.8060-01	.8690-01	.9345	.4792-02	.3589-02	.6570	4.188	518.0
297	37.700	.87000	727.00	.6620-01	.8200-01	.8860-01	.9345	.4881-02	.3647-02	.6630	4.295	519.3
297	37.700	.92600	728.00	.4360-01	.5400-01	.5830-01	.9345	.3215-02	.2403-02	.4370	3.220	519.2
298	39.000	.10000-01	993.00	.6493	.9631	.7877	.9730	.4343-01	.3580-01	3.855	27.37	594.0
298	39.000	.25000-01	994.00	.4887	.6626	.5729	.9720	.3158-01	.2694-01	3.603	24.25	568.0
298	39.000	.30000-01	995.00	-.1770-01	-.1490-01	-.1600-01	.9718	-.8819-03	-.9730-03	.1860	1.103	893.2
307	45.000	.25000	2036.0	.4720-01	.5930-01	.6450-01	.9345	.3577-02	.2619-02	.4510	3.679	532.2
307	45.000	.32500	2038.0	.7230-01	.8980-01	.9700-01	.9345	.5382-02	.4012-02	.7270	5.038	523.3
307	45.000	.35000	2039.0	.7050-01	.8720-01	.9410-01	.9345	.5221-02	.3911-02	.7190	4.914	520.6
307	45.000	.37500	2040.0	.6840-01	.8460-01	.9120-01	.9345	.5060-02	.3796-02	.7010	4.794	519.8
307	45.000	.40000	2041.0	.6810-01	.8410-01	.9080-01	.9345	.5036-02	.3777-02	.6970	4.766	519.9
307	45.000	.43000	2044.0	.6650-01	.8200-01	.8840-01	.9345	.4905-02	.3687-02	.6850	4.684	518.7
307	45.000	.43500	2045.0	.6550-01	.8090-01	.8730-01	.9345	.4840-02	.3633-02	.6720	4.597	519.4
307	45.000	.44000	2046.0	.6540-01	.8070-01	.8700-01	.9345	.4824-02	.3627-02	.6740	4.612	518.6
307	45.000	.45000	2047.0	.6570-01	.8110-01	.8750-01	.9345	.4852-02	.3643-02	.6750	4.642	519.3
307	45.000	.47000	2048.0	.6640-01	.8220-01	.8870-01	.9345	.4922-02	.3684-02	.6760	4.688	521.0
307	45.000	.55000	2049.0	.4970-01	.6160-01	.6650-01	.9345	.3687-02	.2759-02	.5060	3.522	521.1
307	45.000	.60000	2050.0	.6580-01	.8130-01	.8770-01	.9345	.4864-02	.3651-02	.6750	4.617	519.5
307	45.000	.65000	2051.0	.6900-01	.8520-01	.9180-01	.9345	.5095-02	.3829-02	.7110	4.804	518.8
307	45.000	.75000	2052.0	.5780-01	.7150-01	.7710-01	.9345	.4278-02	.3206-02	.5900	3.802	520.4
307	45.000	.80000	2053.0	.7190-01	.8840-01	.9520-01	.9345	.5283-02	.3987-02	.7500	4.789	516.4
307	45.000	.83000	2054.0	.7070-01	.8730-01	.9410-01	.9345	.5223-02	.3920-02	.7250	4.607	519.6
307	45.000	.84000	2055.0	.6940-01	.8560-01	.9230-01	.9345	.5120-02	.3850-02	.7160	4.554	518.5
307	45.000	.85000	2056.0	.6800-01	.8390-01	.9040-01	.9345	.5015-02	.3771-02	.7020	4.526	518.4
307	45.000	.86000	2057.0	.6710-01	.8270-01	.8910-01	.9345	.4943-02	.3721-02	.6940	4.585	517.9
307	45.000	.87000	2058.0	.6510-01	.8020-01	.8650-01	.9345	.4799-02	.3609-02	.6720	4.538	518.4
307	45.000	.89000	2060.0	.6410-01	.7940-01	.8570-01	.9345	.4756-02	.3555-02	.6500	4.399	521.7
307	45.000	.90000	2061.0	.4620-01	.5700-01	.6150-01	.9345	.3410-02	.2565-02	.4770	3.245	518.4
307	45.000	.91000	2062.0	.4560-01	.5730-01	.6220-01	.9345	.3450-02	.2530-02	.4380	3.609	531.5
307	45.000	.92600	2063.0	.4530-01	.5610-01	.6060-01	.9345	.3362-02	.2512-02	.4580	3.277	522.1
307	45.000	.93500	2064.0	.4710-01	.5870-01	.6360-01	.9345	.3526-02	.2612-02	.4650	3.509	526.5
307	45.000	.94500	2065.0	.5540-01	.6870-01	.7430-01	.9345	.4121-02	.3074-02	.5580	3.753	522.9
297	180.00	.15000-01	2182.0	.6094	.9431	.7524	.9731	.4146-01	.3358-01	3.326	24.32	601.9

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT42)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
297	180.00	.20000-01	2183.0	.5740	.7999	.6814	.9721	.3755-01	.3163-01	3.925	29.36	576.8
297	180.00	.25000-01	2184.0	.5343	.7151	.6221	.9721	.3428-01	.2944-01	4.080	29.53	562.3
297	180.00	.30000-01	2185.0	.5332	.7196	.6239	.9719	.3438-01	.2938-01	3.975	28.54	565.6
297	180.00	.40000-01	737.00	.2098	.2530	.2354	.9682	.1297-01	.1156-01	2.374	15.90	495.6
297	180.00	.45000-01	738.00	.4824	.6238	.5692	.9664	.3137-01	.2658-01	4.110	27.22	546.3
297	180.00	.60000-01	739.00	.3985	.5081	.4783	.9613	.2636-01	.2196-01	3.567	24.08	538.5
297	180.00	.70000-01	740.00	.3675	.4675	.4475	.9582	.2466-01	.2025-01	3.319	22.55	537.1
297	180.00	.80000-01	741.00	.2996	.3784	.3682	.9553	.2029-01	.1651-01	2.781	20.36	532.5
297	180.00	.10000+00	742.00	.2619	.3292	.3290	.9501	.1813-01	.1443-01	2.475	16.68	529.5
297	180.00	.12500	743.00	.2052	.2573	.2645	.9447	.1458-01	.1131-01	1.955	14.35	528.0
297	180.00	.15000	744.00	.1685	.2098	.2200	.9405	.1212-01	.9285-02	1.654	11.64	522.8
297	180.00	.17500	745.00	.1200	.1479	.1570	.9375	.8651-02	.6615-02	1.232	9.409	514.7
297	180.00	.20000	746.00	.9280-01	.1136	.1215	.9355	.6698-02	.5112-02	.9760	7.110	510.1
297	180.00	.21500	747.00	.8130-01	.1014	.1097	.9349	.6043-02	.4480-02	.7910	5.543	524.4
297	180.00	.23000	748.00	.6710-01	.8380-01	.9070-01	.9346	.5001-02	.3696-02	.6500	4.858	525.1
297	180.00	.24000	749.00	.5650-01	.7080-01	.7680-01	.9345	.4234-02	.3116-02	.5420	4.125	527.1
297	180.00	.25000	750.00	.2990-01	.3710-01	.4010-01	.9345	.2210-02	.1650-02	.2990	2.450	519.9
297	180.00	.35000	752.00	.6520-01	.8100-01	.8760-01	.9345	.4828-02	.3591-02	.6430	4.118	521.8
297	180.00	.40000	753.00	.6780-01	.8420-01	.9090-01	.9345	.5012-02	.3737-02	.6740	4.392	520.5
297	180.00	.50000	754.00	.6820-01	.8490-01	.9190-01	.9345	.5063-02	.3757-02	.6690	4.429	522.9
297	180.00	.60000	755.00	.6480-01	.8120-01	.8810-01	.9345	.4856-02	.3569-02	.6180	4.001	527.8
297	180.00	.70000	756.00	.6340-01	.7990-01	.8680-01	.9345	.4786-02	.3496-02	.5960	3.965	530.5
297	180.00	.80000	757.00	.6060-01	.7610-01	.8260-01	.9345	.4552-02	.3339-02	.5750	3.639	528.6
297	180.00	.90000	758.00	.3420-01	.4300-01	.4670-01	.9345	.2574-02	.1886-02	.3240	2.115	529.1
297	235.00	.22000	759.00	.7370-01	.9200-01	.9960-01	.9347	.5490-02	.4061-02	.7140	5.371	525.1
297	235.00	.25000	760.00	.3830-01	.4740-01	.5120-01	.9345	.2820-02	.2112-02	.3860	3.072	518.0
297	235.00	.27000	761.00	.3500-01	.4320-01	.4660-01	.9345	.2567-02	.1929-02	.3560	2.692	516.2
297	235.00	.30000	762.00	.6550-01	.8160-01	.8840-01	.9345	.4870-02	.3612-02	.6420	3.906	523.2
297	235.00	.32000	763.00	.6790-01	.8470-01	.9170-01	.9345	.5054-02	.3742-02	.6620	3.963	524.0
297	235.00	.34000	764.00	.6660-01	.8290-01	.8970-01	.9345	.4942-02	.3669-02	.6540	3.927	522.7
297	235.00	.36000	765.00	.6660-01	.8300-01	.8980-01	.9345	.4949-02	.3670-02	.6520	3.968	523.2
297	235.00	.38000	766.00	.6600-01	.8210-01	.8880-01	.9345	.4894-02	.3640-02	.6520	4.013	521.8
299	247.00	.23000	768.00	.6580-01	.8300-01	.9020-01	.9346	.4972-02	.3630-02	.6170	4.629	531.7
299	247.00	.25000	769.00	.3460-01	.4360-01	.4740-01	.9345	.2614-02	.1906-02	.3240	2.538	531.9
299	247.00	.27000	770.00	.4320-01	.5490-01	.5990-01	.9345	.3303-02	.2379-02	.3910	2.866	537.4
299	247.00	.30000	772.00	.6270-01	.7950-01	.8670-01	.9345	.4781-02	.3458-02	.5750	3.531	535.6
299	247.00	.31000	773.00	.6370-01	.8050-01	.8770-01	.9345	.4835-02	.3510-02	.5890	3.593	534.0
299	247.00	.32000	774.00	.6440-01	.8120-01	.8840-01	.9345	.4873-02	.3548-02	.6000	3.632	532.7
299	247.00	.32500	775.00	.6760-01	.8530-01	.9290-01	.9345	.5119-02	.3729-02	.6310	3.832	532.5
299	247.00	.33000	776.00	.6400-01	.8080-01	.8790-01	.9345	.4845-02	.3530-02	.5980	3.639	532.4
299	247.00	.33500	777.00	.6590-01	.8310-01	.9040-01	.9345	.4986-02	.3631-02	.6140	3.742	532.5
299	247.00	.34000	778.00	.6660-01	.8380-01	.9110-01	.9345	.5023-02	.3669-02	.6260	3.813	531.2
299	247.00	.34500	779.00	.6240-01	.7860-01	.8540-01	.9345	.4710-02	.3440-02	.5860	3.582	531.3

IH72, EXTERNAL TANK CLEAN,

HU/HREF

(RVZT42)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
299	247.00	.35000	780.00	.6280-01	.7900-01	.8590-01	.9345	.4734-02	.3461-02	.5920	3.628	530.7
299	247.00	.35500	781.00	.4000-03	.5000-03	.5000-03	.9345	.2712-04	.2018-04	.4000-02	.2200-01	522.0
297	247.00	.36000	782.00	.6460-01	.8040-01	.8710-01	.9345	.4798-02	.3557-02	.6320	3.897	523.3
297	247.00	.36500	783.00	.6410-01	.7980-01	.8630-01	.9345	.4757-02	.3532-02	.6300	3.875	522.6
297	247.00	.37000	784.00	.6150-01	.7640-01	.8260-01	.9345	.4554-02	.3390-02	.6090	3.768	521.4
297	247.00	.37500	785.00	.1000-02	.1300-02	.1400-02	.9345	.7526-04	.5602-04	.1000-01	.6300-01	521.4
297	247.00	.38000	786.00	.6340-01	.7880-01	.8520-01	.9345	.4698-02	.3492-02	.6250	3.910	522.0
297	247.00	.39000	787.00	.6400-01	.7950-01	.8600-01	.9345	.4740-02	.3527-02	.6320	3.970	521.6
297	247.00	.40000	788.00	.6670-01	.8300-01	.8980-01	.9345	.4948-02	.3676-02	.6570	4.155	522.3
298	247.00	.50000	789.00	.6270-01	.7900-01	.8590-01	.9345	.4738-02	.3458-02	.5880	3.801	531.6
298	247.00	.60000	790.00	.7210-01	.9020-01	.9780-01	.9345	.5394-02	.3973-02	.6930	4.595	527.2
298	247.00	.70000	791.00	.6710-01	.8430-01	.9160-01	.9345	.5050-02	.3701-02	.6370	4.538	529.6
298	247.00	.90000	793.00	.4290-01	.5370-01	.5830-01	.9345	.3216-02	.2362-02	.4090	2.662	528.6
308	247.00	.92600	2144.0	.2790-01	.3460-01	.3740-01	.9345	.2070-02	.1546-02	.2820	1.994	522.6
308	247.00	.93000	2149.0	.3760-01	.4690-01	.5080-01	.9345	.2814-02	.2083-02	.3700	2.700	527.0
308	250.57	.92600	2143.0	.2940-01	.3650-01	.3940-01	.9345	.2185-02	.1631-02	.2970	2.102	522.7
308	250.57	.93000	2148.0	.4040-01	.5040-01	.5460-01	.9345	.3026-02	.2240-02	.3980	2.839	527.0
298	258.00	.27000	794.00	.4060-01	.5110-01	.5560-01	.9345	.3063-02	.2240-02	.3830	2.753	530.7
298	258.00	.29000	795.00	.4550-01	.5710-01	.6190-01	.9345	.3413-02	.2511-02	.4360	2.714	528.0
298	258.00	.30000	796.00	.6230-01	.7830-01	.8510-01	.9345	.4694-02	.3433-02	.5870	3.589	530.6
306	258.00	.32000	798.00	.6390-01	.7980-01	.8650-01	.9345	.4800-02	.3544-02	.6250	3.804	528.3
306	258.00	.34000	802.00	.6370-01	.7940-01	.8590-01	.9345	.4769-02	.3534-02	.6300	3.847	526.4
306	258.00	.34500	803.00	.6220-01	.7750-01	.8390-01	.9345	.4656-02	.3450-02	.6150	3.768	526.4
306	258.00	.35500	805.00	.6250-01	.7800-01	.8460-01	.9345	.4692-02	.3468-02	.6130	3.755	527.8
306	258.00	.36000	806.00	.6080-01	.7580-01	.8210-01	.9345	.4554-02	.3376-02	.6020	3.700	526.2
306	258.00	.36500	807.00	.6280-01	.7820-01	.8460-01	.9345	.4697-02	.3484-02	.6230	3.835	525.9
306	258.00	.37000	808.00	.6090-01	.7580-01	.8210-01	.9345	.4556-02	.3380-02	.6040	3.733	525.8
306	258.00	.37500	809.00	.6180-01	.7700-01	.8330-01	.9345	.4622-02	.3431-02	.6140	3.793	525.7
306	258.00	.38000	810.00	.6150-01	.7660-01	.8290-01	.9345	.4603-02	.3414-02	.6100	3.790	525.9
298	258.00	.40000	812.00	.6490-01	.8120-01	.8810-01	.9345	.4855-02	.3575-02	.6230	3.880	527.3
308	258.00	.93500	2151.0	.4890-01	.6120-01	.6630-01	.9345	.3676-02	.2711-02	.4770	3.398	528.9
298	270.00	.40000-01	985.00	.4243	.5553	.4995	.9681	.2754-01	.2339-01	3.478	22.55	553.0
298	270.00	.50000-01	986.00	.4481	.5843	.5368	.9646	.2959-01	.2470-01	3.719	24.00	551.2
298	270.00	.60000-01	987.00	.4174	.5362	.5039	.9613	.2778-01	.2301-01	3.644	24.03	543.4
298	270.00	.70000-01	988.00	.3605	.4631	.4426	.9581	.2440-01	.1987-01	3.148	21.20	543.3
298	270.00	.80000-01	989.00	.3143	.4010	.3897	.9552	.2149-01	.1733-01	2.814	20.02	539.3
298	270.00	.10000+00	990.00	.2524	.3170	.3169	.9500	.1747-01	.1391-01	2.397	15.77	529.5
298	270.00	.15000	991.00	.1629	.2024	.2122	.9405	.1170-01	.8981-02	1.615	12.00	521.9
298	270.00	.20000	992.00	.9090-01	.1118	.1197	.9355	.6598-02	.5014-02	.9450	6.498	513.3
298	270.00	.23000	813.00	.6850-01	.8600-01	.9340-01	.9346	.5150-02	.3775-02	.6490	4.763	529.7
298	270.00	.24000	814.00	.5620-01	.7090-01	.7710-01	.9345	.4253-02	.3100-02	.5250	4.283	532.2
298	270.00	.25000	815.00	.3870-01	.4850-01	.5270-01	.9345	.2904-02	.2134-02	.3700	2.946	528.3
298	270.00	.27000	816.00	.3920-01	.4920-01	.5340-01	.9345	.2944-02	.2160-02	.3730	2.676	529.0

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT42)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
298	270.00	.29000	817.00	.5350-01	.6690-01	.7250-01	.9345	.3996-02	.2950-02	.5180	3.256	526.0
298	270.00	.30000	818.00	.6490-01	.8110-01	.8780-01	.9345	.4842-02	.3578-02	.6300	3.892	525.7
298	270.00	.31000	819.00	.6600-01	.8240-01	.8920-01	.9345	.4919-02	.3638-02	.6420	3.934	525.3
298	270.00	.32000	820.00	.6950-01	.8650-01	.9360-01	.9345	.5160-02	.3830-02	.6830	4.179	523.4
298	270.00	.32500	821.00	.6990-01	.8720-01	.9440-01	.9345	.5203-02	.3856-02	.6850	4.176	524.1
298	270.00	.33000	822.00	.6890-01	.8570-01	.9280-01	.9345	.5113-02	.3801-02	.6810	4.166	522.6
298	270.00	.33500	823.00	.6760-01	.8410-01	.9090-01	.9345	.5011-02	.3729-02	.6700	4.112	522.1
298	270.00	.34500	825.00	.6690-01	.8320-01	.9000-01	.9345	.4959-02	.3690-02	.6630	4.057	522.1
298	270.00	.36000	828.00	.6490-01	.8080-01	.8750-01	.9345	.4823-02	.3577-02	.6360	3.881	523.8
298	270.00	.36500	829.00	.6760-01	.8410-01	.9100-01	.9345	.5018-02	.3724-02	.6640	4.061	523.4
298	270.00	.37000	830.00	.6260-01	.7840-01	.8500-01	.9345	.4688-02	.3449-02	.5990	3.669	527.9
298	270.00	.37500	831.00	.6320-01	.7910-01	.8580-01	.9345	.4731-02	.3484-02	.6070	3.739	527.4
298	270.00	.38000	832.00	.6380-01	.7990-01	.8670-01	.9345	.4778-02	.3517-02	.6120	3.769	527.6
298	270.00	.39000	833.00	.6530-01	.8180-01	.8870-01	.9345	.4892-02	.3602-02	.6280	3.906	527.5
298	270.00	.40000	834.00	.6490-01	.8120-01	.8810-01	.9345	.4858-02	.3578-02	.6240	3.897	527.2
298	270.00	.50000	835.00	.6620-01	.8370-01	.9120-01	.9345	.5027-02	.3649-02	.6120	3.891	534.1
298	270.00	.60000	836.00	.7010-01	.8780-01	.9530-01	.9345	.5256-02	.3863-02	.6700	4.506	528.2
298	270.00	.70000	837.00	.7280-01	.9160-01	.9950-01	.9345	.5485-02	.4013-02	.6880	4.881	530.4
298	270.00	.80000	838.00	.7280-01	.9090-01	.9850-01	.9345	.5428-02	.4015-02	.7090	4.452	525.2
298	270.00	.90000	839.00	.4880-01	.6100-01	.6620-01	.9345	.3648-02	.2690-02	.4710	3.042	526.7
308	270.00	.92600	2141.0	.3850-01	.4770-01	.5160-01	.9345	.2858-02	.2133-02	.3880	2.691	522.7
308	270.00	.93000	2146.0	.4610-01	.5750-01	.6220-01	.9345	.3449-02	.2556-02	.4560	3.251	526.5
308	270.00	.93500	2150.0	.5210-01	.6510-01	.7050-01	.9345	.3906-02	.2888-02	.5120	3.650	527.5
308	289.43	.92600	2140.0	.4060-01	.5020-01	.5410-01	.9345	.2999-02	.2248-02	.4150	2.941	520.3
308	289.43	.93000	2145.0	.4690-01	.5830-01	.6300-01	.9345	.3492-02	.2598-02	.4680	3.378	524.4
298	292.50	.23000	840.00	.6350-01	.7990-01	.8680-01	.9346	.4786-02	.3501-02	.5990	4.866	530.7
298	292.50	.25000	841.00	.3800-01	.4770-01	.5170-01	.9345	.2852-02	.2095-02	.3630	2.839	528.5
298	292.50	.30000	843.00	.6830-01	.8580-01	.9330-01	.9345	.5143-02	.3764-02	.6450	3.871	530.3
298	292.50	.35000	845.00	.6790-01	.8480-01	.9190-01	.9345	.5065-02	.3741-02	.6580	4.075	525.9
298	292.50	.37000	846.00	.6720-01	.8390-01	.9100-01	.9345	.5016-02	.3703-02	.6500	4.047	526.2
298	292.50	.40000	847.00	.6420-01	.8010-01	.8680-01	.9345	.4784-02	.3541-02	.6260	3.947	524.8
298	292.50	.50000	849.00	.6290-01	.7940-01	.8640-01	.9345	.4764-02	.3469-02	.5860	3.796	532.7
298	292.50	.60000	851.00	.6790-01	.8520-01	.9240-01	.9345	.5095-02	.3746-02	.6500	4.399	528.1
298	292.50	.65000	852.00	.6980-01	.8730-01	.9470-01	.9345	.5223-02	.3847-02	.6710	4.614	527.2
298	292.50	.70000	853.00	.6760-01	.8520-01	.9260-01	.9345	.5108-02	.3726-02	.6330	4.478	531.8
298	292.50	.75000	854.00	.5710-01	.7180-01	.7800-01	.9345	.4298-02	.3150-02	.5420	3.548	529.6
298	292.50	.80000	855.00	.6540-01	.8170-01	.8860-01	.9345	.4883-02	.3607-02	.6350	4.172	525.8
308	292.50	.82000	2129.0	.7160-01	.8890-01	.9610-01	.9345	.5328-02	.3966-02	.7160	4.440	524.1
308	292.50	.83000	2130.0	.7140-01	.8890-01	.9620-01	.9345	.5331-02	.3956-02	.7080	4.421	525.8
308	292.50	.85000	2132.0	.6710-01	.8350-01	.9040-01	.9345	.5007-02	.3720-02	.6680	4.197	525.2
308	292.50	.86000	2133.0	.6650-01	.8270-01	.8940-01	.9345	.4956-02	.3685-02	.6630	4.142	524.8
308	292.50	.87000	2134.0	.7200-01	.8950-01	.9680-01	.9345	.5366-02	.3988-02	.7170	4.505	525.0
308	292.50	.88000	2135.0	.6900-01	.8580-01	.9280-01	.9345	.5143-02	.3826-02	.6890	4.333	524.5

IH72, EXTERNAL TANK CLEAN,

(RVZT42)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
308	292.50	.89000	2136.0	.6760-01	.8390-01	.9060-01	.9345	.5023-02	.3744-02	.6790	4.282	523.4
298	292.50	.90000	856.00	.5170-01	.6440-01	.6970-01	.9345	.3844-02	.2850-02	.5070	3.324	524.0
308	292.50	.92600	2138.0	.4130-01	.5110-01	.5510-01	.9345	.3052-02	.2290-02	.4230	3.002	519.9
308	292.50	.93000	2139.0	.4780-01	.5930-01	.6410-01	.9345	.3553-02	.2651-02	.4820	3.499	523.0
308	301.50	.82000	2116.0	.6400-01	.7950-01	.8590-01	.9345	.4762-02	.3546-02	.6410	3.975	523.9
308	301.50	.83000	2117.0	.6600-01	.8190-01	.8850-01	.9345	.4905-02	.3657-02	.6640	4.093	523.3
308	301.50	.83500	2118.0	.6480-01	.8050-01	.8700-01	.9345	.4821-02	.3593-02	.6510	3.985	523.4
308	301.50	.84000	2119.0	.6330-01	.7860-01	.8490-01	.9345	.4706-02	.3506-02	.6350	3.915	523.7
308	301.50	.85000	2120.0	.6690-01	.8290-01	.8950-01	.9345	.4961-02	.3706-02	.6760	4.183	522.3
308	301.50	.86000	2021.0	.6760-01	.8390-01	.9060-01	.9345	.5021-02	.3747-02	.6820	4.242	522.7
308	301.50	.87000	2122.0	.6710-01	.8330-01	.9000-01	.9345	.4986-02	.3721-02	.6770	4.199	522.8
308	301.50	.88000	2123.0	.6530-01	.8100-01	.8750-01	.9345	.4848-02	.3621-02	.6600	4.119	522.4
308	301.50	.89000	2124.0	.6580-01	.8150-01	.8800-01	.9345	.4874-02	.3648-02	.6690	4.215	521.2
308	301.50	.90000	2125.0	.5020-01	.6190-01	.6680-01	.9345	.3699-02	.2783-02	.5190	3.298	518.3
308	301.50	.92600	2127.0	.4980-01	.6150-01	.6640-01	.9345	.3678-02	.2759-02	.5100	3.239	519.9
308	301.50	.93500	2128.0	.5210-01	.6470-01	.7000-01	.9345	.3876-02	.2885-02	.5210	3.550	524.3
308	305.40	.82000	2113.0	.6650-01	.8250-01	.8920-01	.9345	.4943-02	.3685-02	.6680	4.123	523.3
308	305.40	.83000	2114.0	.6700-01	.8310-01	.8980-01	.9345	.4974-02	.3713-02	.6760	4.172	522.6
308	305.40	.83500	2115.0	.6580-01	.8160-01	.8820-01	.9345	.4888-02	.3644-02	.6610	4.109	523.4
298	305.40	.84000	857.00	.6440-01	.8030-01	.8690-01	.9345	.4791-02	.3551-02	.6310	3.943	524.1
306	305.40	.85000	858.00	.1000-02	.1200-02	.1200-02	.9345	.6670-04	.5812-04	.2100-01	.1440	345.6
306	305.40	.86000	859.00	.6360-01	.7910-01	.8550-01	.9345	.4747-02	.3529-02	.6350	4.023	524.7
306	305.40	.87000	860.00	.6380-01	.7950-01	.8610-01	.9345	.4778-02	.3542-02	.6320	4.013	526.2
306	305.40	.88000	861.00	.6600-01	.8210-01	.8880-01	.9345	.4929-02	.3662-02	.6570	4.175	525.2
306	305.40	.89000	862.00	.6550-01	.8150-01	.8820-01	.9345	.4893-02	.3636-02	.6540	4.176	524.9
306	305.40	.90000	863.00	.5910-01	.7340-01	.7940-01	.9345	.4405-02	.3278-02	.5910	3.801	524.3
306	305.40	.91000	864.00	.3670-01	.4540-01	.4900-01	.9345	.2718-02	.2036-02	.3750	2.762	520.6
306	305.40	.92600	865.00	.4840-01	.6010-01	.6510-01	.9345	.3610-02	.2684-02	.4830	3.540	524.7
306	309.30	.80000	866.00	.2300-02	.2500-02	.2600-02	.9345	.1440-03	.1279-03	.5300-01	.3820	290.8
306	309.30	.81000	867.00	.6560-01	.8180-01	.8860-01	.9345	.4919-02	.3639-02	.6460	4.076	527.2
306	309.30	.83000	869.00	.5270-01	.6570-01	.7120-01	.9345	.3952-02	.2924-02	.5190	3.285	527.2
306	315.00	.40000-01	870.00	-.4000-03	-.3000-03	-.4000-03	.9681	-.2012-04	-.2223-04	.5000-02	.2600-01	918.3
306	315.00	.50000-01	871.00	.4303	.5602	.5148	.9646	.2857-01	.2388-01	3.627	23.12	552.7
306	315.00	.60000-01	872.00	.3829	.4950	.4643	.9613	.2576-01	.2125-01	3.306	21.93	549.0
298	315.00	.70000-01	873.00	.3548	.4590	.4382	.9581	.2416-01	.1956-01	3.023	20.56	547.2
298	315.00	.80000-01	874.00	.2985	.3825	.3716	.9552	.2049-01	.1645-01	2.628	18.60	542.0
298	315.00	.10000+00	875.00	.2515	.3189	.3189	.9500	.1758-01	.1386-01	2.299	15.17	535.9
298	315.00	.15000	876.00	.1551	.1945	.2045	.9405	.1127-01	.8550-02	1.479	10.93	528.7
298	315.00	.20000	877.00	.9560-01	.1182	.1268	.9355	.6992-02	.5273-02	.9700	6.636	517.8
298	315.00	.35000	878.00	.7210-01	.8980-01	.9710-01	.9345	.5356-02	.3973-02	.7070	4.448	523.7
298	315.00	.40000	879.00	.6930-01	.8640-01	.9350-01	.9345	.5153-02	.3822-02	.6800	4.361	523.8
298	315.00	.50000	880.00	.6050-01	.7620-01	.8280-01	.9345	.4565-02	.3334-02	.5690	3.936	531.2
298	315.00	.55000	881.00	.5230-01	.6570-01	.7140-01	.9345	.3936-02	.2882-02	.4950	3.324	530.0

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT42)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
298	315.00	.60000	882.00	.6660-01	.8330-01	.9040-01	.9345	.4981-02	.3669-02	.6400	4.346	527.2
298	315.00	.65000	883.00	.6180-01	.7730-01	.8380-01	.9345	.4620-02	.3407-02	.5960	4.113	526.6
298	315.00	.70000	884.00	.6510-01	.8160-01	.8850-01	.9345	.4881-02	.3586-02	.6210	4.458	528.5
298	315.00	.75000	885.00	.5760-01	.7220-01	.7830-01	.9345	.4319-02	.3174-02	.5510	3.502	528.3
298	315.00	.80000	886.00	.6400-01	.7980-01	.8640-01	.9345	.4762-02	.3529-02	.6270	3.983	524.2
298	315.00	.84000	887.00	.6480-01	.8060-01	.8720-01	.9345	.4806-02	.3573-02	.6400	4.073	522.5
306	315.00	.85000	888.00	.6200-01	.7720-01	.8360-01	.9345	.4637-02	.3443-02	.6170	3.953	525.4
306	315.00	.87000	890.00	.6420-01	.7980-01	.8630-01	.9345	.4789-02	.3562-02	.6410	4.122	524.6
306	315.00	.88000	891.00	.6190-01	.7710-01	.8340-01	.9345	.4628-02	.3435-02	.6150	3.975	525.5
306	315.00	.89000	892.00	.6210-01	.7720-01	.8350-01	.9345	.4635-02	.3447-02	.6210	4.083	524.6
306	315.00	.90000	893.00	.5930-01	.7390-01	.8000-01	.9345	.4438-02	.3291-02	.5880	3.909	526.1
306	315.00	.91000	894.00	.3640-01	.4500-01	.4850-01	.9345	.2692-02	.2019-02	.3730	2.757	520.0
306	315.00	.92600	895.00	.4650-01	.5790-01	.6270-01	.9345	.3481-02	.2579-02	.4590	3.375	526.5
306	322.30	.42000	897.00	.6540-01	.8150-01	.8820-01	.9345	.4894-02	.3630-02	.6480	4.213	526.0
306	322.30	.43500	898.00	.7590-01	.9450-01	.1023	.9345	.5676-02	.4214-02	.7550	4.771	525.4
306	322.30	.45000	899.00	.6390-01	.7960-01	.8620-01	.9345	.4783-02	.3544-02	.6310	4.173	526.5
306	322.30	.50000	900.00	.6240-01	.7840-01	.8510-01	.9345	.4725-02	.3462-02	.5980	4.013	531.9
306	322.30	.60000	901.00	.6720-01	.8400-01	.9100-01	.9345	.5052-02	.3727-02	.6560	4.394	528.7
306	322.30	.87000	904.00	.2080-01	-.3300-01	-.1830-01	.9345	-.1017-02	.1155-02	.2500-01	.1480	683.0
308	324.45	.41000	2110.0	.6730-01	.8370-01	.9060-01	.9345	.5019-02	.3732-02	.6720	4.282	524.7
308	324.45	.92600	2164.0	.3970-01	.4900-01	.5290-01	.9345	.2929-02	.2200-02	.4080	2.939	519.3
308	326.85	.40500	2108.0	.6690-01	.8290-01	.8960-01	.9345	.4963-02	.3705-02	.6750	4.305	522.6
307	326.85	.44000	2021.0	.6950-01	.8630-01	.9330-01	.9345	.5177-02	.3853-02	.6950	4.472	524.0
307	326.85	.54600	2024.0	.3530-01	.4380-01	.4740-01	.9345	.2627-02	.1956-02	.3540	2.397	523.8
307	326.85	.58100	2025.0	.5990-01	.7510-01	.8140-01	.9345	.4518-02	.3325-02	.5810	4.100	529.8
307	326.85	.61600	2026.0	.6010-01	.7500-01	.8130-01	.9345	.4508-02	.3332-02	.5890	4.134	527.8
307	326.85	.65200	2027.0	.6470-01	.8070-01	.8740-01	.9345	.4846-02	.3590-02	.6390	4.492	526.4
307	326.85	.68600	2028.0	.6460-01	.8050-01	.8720-01	.9345	.4839-02	.3582-02	.6370	4.512	526.8
307	326.85	.72260	2029.0	.4460-01	.5570-01	.6040-01	.9345	.3349-02	.2474-02	.4370	3.075	528.0
307	326.85	.75790	2030.0	.4080-01	.5070-01	.5480-01	.9345	.3040-02	.2262-02	.4080	2.636	524.3
307	326.85	.79310	2031.0	.6830-01	.8510-01	.9220-01	.9345	.5112-02	.3789-02	.6760	4.280	526.2
307	326.85	.82830	2032.0	.6860-01	.8540-01	.9240-01	.9345	.5129-02	.3807-02	.6810	4.354	525.5
307	326.85	.86350	2033.0	.6620-01	.8230-01	.8890-01	.9345	.4933-02	.3674-02	.6650	4.214	523.7
307	326.85	.90000	2034.0	.7250-01	.9020-01	.9760-01	.9345	.5412-02	.4024-02	.7240	4.548	524.7
308	326.85	.92600	2163.0	.4100-01	.5070-01	.5460-01	.9345	.3028-02	.2273-02	.4210	3.032	519.6
307	326.85	.93390	2035.0	.5480-01	.6830-01	.7400-01	.9345	.4106-02	.3037-02	.5390	3.645	527.2
308	330.20	.40000	2104.0	.7100-01	.8830-01	.9540-01	.9345	.5289-02	.3937-02	.7110	4.533	524.1
308	330.20	.40500	2105.0	.7080-01	.8780-01	.9490-01	.9345	.5261-02	.3922-02	.7110	4.534	523.4
308	330.20	.41000	2106.0	.7020-01	.8720-01	.9430-01	.9345	.5226-02	.3891-02	.7030	4.468	524.1
306	330.20	.42000	905.00	.6610-01	.8200-01	.8860-01	.9345	.4919-02	.3670-02	.6670	4.352	523.0
306	330.20	.43500	906.00	.6170-01	.7680-01	.8310-01	.9345	.4612-02	.3424-02	.6130	4.022	525.5
306	330.20	.45000	907.00	.6060-01	.7560-01	.8190-01	.9345	.4546-02	.3364-02	.5970	3.934	527.2
306	330.20	.50000	908.00	.5770-01	.7260-01	.7890-01	.9345	.4377-02	.3203-02	.5510	3.969	532.6

IH72, EXTERNAL TANK CLEAN.

HU/HREF

(RVZT42)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
306	330.20	.60000	909.00	.6480-01	.8120-01	.8810-01	.9345	.4891-02	.3598-02	.6280	4.147	530.0
306	330.20	.70000	910.00	.6480-01	.8130-01	.8830-01	.9345	.4900-02	.3596-02	.6240	4.237	531.2
306	330.20	.80000	911.00	.5170-01	.6470-01	.7020-01	.9345	.3898-02	.2870-02	.5020	3.248	529.6
306	330.20	.87000	912.00	.9800-02	.1230-01	.1330-01	.9345	.7407-03	.5452-03	.9500-01	.6150	529.7
308	330.20	.92600	2162.0	.4070-01	.5020-01	.5420-01	.9345	.3003-02	.2253-02	.4170	2.993	519.8
308	334.98	.92600	2161.0	.4220-01	.5230-01	.5650-01	.9345	.3130-02	.2340-02	.4280	3.062	521.8
306	334.98	.93500	913.00	.5430-01	.6780-01	.7340-01	.9345	.4074-02	.3016-02	.5360	3.935	526.9
306	334.98	.94500	914.00	.2870-01	.3550-01	.3830-01	.9345	.2128-02	.1594-02	.2930	2.136	520.9
306	337.50	.40000-01	915.00	.4779	.6238	.5615	.9682	.3116-01	.2652-01	3.994	25.22	554.0
306	337.50	.50000-01	916.00	.4469	.5807	.5339	.9646	.2963-01	.2480-01	3.791	24.39	551.8
306	337.50	.70000-01	918.00	.1438	.1745	.1686	.9582	.9358-02	.7980-02	1.596	11.34	504.6
306	337.50	.80000-01	919.00	.3123	.3964	.3855	.9553	.2139-01	.1733-01	2.876	19.70	538.7
306	337.50	.10000+00	920.00	.2491	.3124	.3123	.9501	.1733-01	.1383-01	2.404	16.19	530.8
306	337.50	.15000	921.00	.1607	.1997	.2093	.9405	.1162-01	.8915-02	1.607	11.78	524.4
306	337.50	.20000	922.00	.9790-01	.1201	.1285	.9355	.7132-02	.5432-02	1.035	7.008	514.1
308	337.50	.42000	923.00	.6270-01	.7800-01	.8430-01	.9345	.4678-02	.3481-02	.6270	4.141	524.4
306	337.50	.42500	2167.0	.6440-01	.8000-01	.8650-01	.9345	.4793-02	.3569-02	.6450	4.208	524.0
306	337.50	.43500	924.00	.6670-01	.8310-01	.8990-01	.9345	.4987-02	.3704-02	.6640	4.394	525.3
306	337.50	.85000	926.00	.6140-01	.7660-01	.8290-01	.9345	.4600-02	.3409-02	.6070	3.970	526.4
306	337.50	.86000	927.00	.6300-01	.7850-01	.8490-01	.9345	.4712-02	.3498-02	.6260	4.106	525.6
306	337.50	.87000	928.00	.6210-01	.7730-01	.8360-01	.9345	.4641-02	.3444-02	.6160	4.054	525.7
306	337.50	.88000	929.00	.4950-01	.6040-01	.6490-01	.9345	.3601-02	.2747-02	.5350	3.565	510.0
306	337.50	.89000	930.00	.6140-01	.7710-01	.8360-01	.9345	.4642-02	.3409-02	.5920	3.929	530.9
306	337.50	.90000	931.00	.5270-01	.6610-01	.7170-01	.9345	.3977-02	.2926-02	.5110	3.472	530.1
306	337.50	.91000	932.00	.3380-01	.4210-01	.4560-01	.9345	.2529-02	.1878-02	.3370	2.491	525.3
298	337.50	.92600	933.00	.4420-01	.5520-01	.5970-01	.9345	.3293-02	.2439-02	.4320	3.190	524.4
298	343.12	.41500	934.00	.6880-01	.8540-01	.9230-01	.9345	.5088-02	.3791-02	.6840	4.491	521.4
298	343.12	.42000	935.00	.6690-01	.8320-01	.9000-01	.9345	.4963-02	.3689-02	.6600	4.375	522.7
298	343.12	.42500	936.00	.6790-01	.8440-01	.9120-01	.9345	.5029-02	.3742-02	.6720	4.468	522.1
298	343.12	.44500	939.00	.6320-01	.7860-01	.8510-01	.9345	.4691-02	.3485-02	.6230	4.187	523.0
298	343.12	.45000	940.00	.6340-01	.7880-01	.8530-01	.9345	.4702-02	.3493-02	.6250	4.199	522.9
298	343.12	.50000	941.00	.6130-01	.7720-01	.8400-01	.9345	.4628-02	.3379-02	.5750	3.934	531.4
298	343.12	.60000	942.00	.6540-01	.8200-01	.8900-01	.9345	.4907-02	.3607-02	.6260	4.076	528.1
298	343.12	.80000	944.00	.6410-01	.8030-01	.8700-01	.9345	.4798-02	.3535-02	.6170	4.067	527.1
308	345.56	.42500	2168.0	.6630-01	.8230-01	.8900-01	.9345	.4932-02	.3674-02	.6650	4.336	523.8
308	345.56	.92600	2160.0	.4410-01	.5460-01	.5900-01	.9345	.3268-02	.2444-02	.4470	3.197	521.8
298	348.00	.35000	945.00	.6800-01	.8450-01	.9130-01	.9345	.5034-02	.3749-02	.6750	4.333	521.7
298	348.00	.36000	946.00	.6820-01	.8480-01	.9170-01	.9345	.5053-02	.3762-02	.6770	4.355	521.9
298	348.00	.37000	947.00	.6660-01	.8260-01	.8920-01	.9345	.4919-02	.3670-02	.6650	4.293	520.6
306	348.00	.37500	948.00	.6670-01	.8280-01	.8950-01	.9345	.4969-02	.3699-02	.6680	4.308	524.0
306	348.00	.38000	949.00	.6570-01	.8160-01	.8820-01	.9345	.4897-02	.3644-02	.6580	4.277	524.2
306	348.00	.38500	950.00	.6570-01	.8160-01	.8820-01	.9345	.4897-02	.3645-02	.6580	4.294	524.1
306	348.00	.39000	951.00	.7040-01	.8760-01	.9470-01	.9345	.5256-02	.3909-02	.7040	4.621	524.5

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT42)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
306	348.00	.39500	952.00	.6280-01	.7800-01	.8440-01	.9345	.4682-02	.3485-02	.6290	4.067	524.1
306	348.00	.40000	953.00	.6570-01	.8160-01	.8820-01	.9345	.4893-02	.3644-02	.6590	4.337	523.8
306	348.00	.41000	955.00	.6740-01	.8380-01	.9060-01	.9345	.5030-02	.3740-02	.6730	4.440	524.7
306	348.00	.42000	957.00	.6550-01	.8140-01	.8810-01	.9345	.4886-02	.3633-02	.6540	4.338	524.7
306	348.00	.42500	958.00	.6400-01	.7960-01	.8610-01	.9345	.4779-02	.3552-02	.6380	4.236	524.9
306	348.00	.43000	959.00	.6580-01	.8170-01	.8840-01	.9345	.4905-02	.3649-02	.6580	4.353	524.4
306	348.00	.44000	960.00	.6230-01	.7740-01	.8360-01	.9345	.4642-02	.3458-02	.6260	4.155	523.7
306	348.00	.44500	961.00	.6340-01	.7890-01	.8530-01	.9345	.4736-02	.3517-02	.6300	4.182	525.4
306	348.00	.85000	968.00	.6390-01	.7980-01	.8650-01	.9345	.4799-02	.3549-02	.6290	4.117	527.5
306	348.00	.86000	969.00	.6900-01	.8650-01	.9380-01	.9345	.5208-02	.3829-02	.6670	4.378	530.3
307	348.00	.91000	974.00	.3880-01	.4840-01	.5230-01	.9345	.2904-02	.2153-02	.3840	2.834	526.0
308	352.20	.93700	2089.0	.3480-01	.4330-01	.4680-01	.9345	.2594-02	.1926-02	.3450	2.440	525.5
308	354.00	.42500	2169.0	.6780-01	.8420-01	.9100-01	.9345	.5045-02	.3759-02	.6810	4.440	523.7
308	354.00	.43000	2174.0	.6760-01	.8410-01	.9090-01	.9345	.5037-02	.3747-02	.6750	4.403	524.5
308	354.00	.43500	2177.0	.6710-01	.8320-01	.8990-01	.9345	.4983-02	.3717-02	.6750	4.407	523.0
308	354.00	.44000	2179.0	.6420-01	.7970-01	.8620-01	.9345	.4777-02	.3556-02	.6420	4.188	524.1
308	355.16	.92600	2158.0	.3620-01	.4490-01	.4860-01	.9345	.2693-02	.2005-02	.3620	2.627	524.2

EXTERNAL TANK

PARAMETRIC DATA

ALPHA = -5.000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
282	-5.030	-9.000	4.020	71.90	749.0	177.0	.4610	5.213	2621.	.2184-03	.1425-06	4.017
283	-5.030	-9.000	4.020	71.90	750.0	177.1	.4610	5.214	2622.	.2183-03	.1426-06	4.014
284	-5.040	-9.000	4.020	71.80	749.0	176.9	.4600	5.206	2620.	.2182-03	.1424-06	4.014
294	-5.030	-9.000	4.020	71.80	750.0	177.1	.4600	5.208	2622.	.2181-03	.1426-06	4.009
295	-5.020	-9.000	4.020	71.90	749.0	177.0	.4610	5.215	2621.	.2185-03	.1425-06	4.018
296	-5.010	-9.000	4.020	71.80	750.0	177.1	.4610	5.212	2621.	.2183-03	.1426-06	4.013

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
282	.5085-01	.1147-01
283	.5086-01	.1148-01
284	.5081-01	.1148-01
294	.5083-01	.1148-01
295	.5086-01	.1147-01
296	.5085-01	.1148-01

TEST DATA

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
295	.00000	.25000-01	2187.0	.5216	.6441	.5872	.9706	.2987-01	.2653-01	5.227	36.82	552.2
294	.00000	.40000-01	600.00	.4164	.5172	.4785	.9667	.2432-01	.2116-01	4.067	26.01	557.4
294	.00000	.50000-01	601.00	.3907	.4830	.4548	.9631	.2312-01	.1986-01	3.895	25.03	553.4
294	.00000	.70000-01	603.00	.3251	.4006	.3893	.9563	.1978-01	.1653-01	3.288	22.40	550.6
294	.00000	.80000-01	604.00	.3251	.3999	.3943	.9531	.2004-01	.1652-01	3.312	21.52	549.1
294	.00000	.15000	606.00	.1496	.1819	.1947	.9348	.9896-02	.7602-02	1.603	11.70	538.7
294	.00000	.20000	607.00	.8640-01	.1047	.1162	.9264	.5907-02	.4393-02	.9450	6.203	534.5
294	.00000	.21000	608.00	.7750-01	.9500-01	.1070	.9253	.5440-02	.3937-02	.7980	5.514	546.9
294	.00000	.22000	609.00	.6630-01	.8110-01	.9160-01	.9243	.4656-02	.3367-02	.6900	5.144	544.5
294	.00000	.30000	610.00	.5940-01	.7230-01	.8210-01	.9228	.4171-02	.3019-02	.6320	4.342	540.2
294	.00000	.35000	611.00	.9000-03	.1100-02	.1200-02	.9228	.6268-04	.4611-04	.1000-01	.6800-01	530.7
294	.00000	.36000	612.00	.5410-01	.6580-01	.7450-01	.9228	.3788-02	.2749-02	.5800	3.914	538.6

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT43)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
294	.00000	.37500	614.00	.5500-01	.6680-01	.7580-01	.9228	.3850-02	.2794-02	.5890	3.974	538.8
296	.00000	.38000	615.00	.5670-01	.6790-01	.7610-01	.9228	.3868-02	.2885-02	.6560	4.468	522.0
296	.00000	.38500	616.00	.5650-01	.6770-01	.7580-01	.9228	.3853-02	.2874-02	.6540	4.452	521.9
296	.00000	.39500	618.00	.5200-01	.6230-01	.6970-01	.9228	.3546-02	.2645-02	.6030	4.115	521.7
296	.00000	.40000	619.00	.5760-01	.6890-01	.7720-01	.9228	.3925-02	.2927-02	.6660	4.519	522.0
296	.00000	.40500	620.00	.5540-01	.6600-01	.7370-01	.9228	.3749-02	.2816-02	.6550	4.470	517.0
296	.00000	.41000	621.00	.5880-01	.7010-01	.7840-01	.9228	.3984-02	.2989-02	.6920	4.723	517.9
296	.00000	.41500	622.00	.5660-01	.6760-01	.7560-01	.9228	.3842-02	.2879-02	.6640	4.516	518.8
296	.00000	.43000	625.00	.5400-01	.6440-01	.7190-01	.9228	.3657-02	.2746-02	.6380	4.353	517.2
296	.00000	.44000	626.00	.5160-01	.6150-01	.6860-01	.9228	.3489-02	.2621-02	.6100	4.160	517.0
296	.00000	.44500	627.00	.5080-01	.6050-01	.6760-01	.9228	.3439-02	.2582-02	.5990	4.126	517.4
296	.00000	.45000	628.00	.5060-01	.6030-01	.6730-01	.9228	.3424-02	.2571-02	.5970	4.113	517.2
296	.00000	.45500	629.00	.4930-01	.5890-01	.6570-01	.9228	.3343-02	.2509-02	.5820	4.065	517.7
294	.00000	.46000	630.00	.5160-01	.6270-01	.7100-01	.9228	.3607-02	.2622-02	.5550	3.749	537.8
294	.00000	.47000	631.00	.5210-01	.6320-01	.7160-01	.9228	.3637-02	.2646-02	.5620	3.795	537.2
294	.00000	.48000	632.00	.5300-01	.6440-01	.7300-01	.9228	.3709-02	.2692-02	.5680	3.857	538.6
294	.00000	.49000	633.00	.5110-01	.6190-01	.7000-01	.9228	.3557-02	.2598-02	.5570	3.824	535.1
294	.00000	.50000	634.00	.4820-01	.5830-01	.6580-01	.9228	.3343-02	.2451-02	.5320	3.747	532.7
294	.00000	.55000	635.00	.4250-01	.5130-01	.5780-01	.9228	.2938-02	.2161-02	.4720	3.163	530.9
294	.00000	.60000	636.00	.5420-01	.6580-01	.7450-01	.9228	.3786-02	.2754-02	.5850	3.788	537.3
294	.00000	.65000	637.00	.5600-01	.6800-01	.7700-01	.9228	.3914-02	.2845-02	.6020	3.913	537.8
294	.00000	.70000	638.00	.5960-01	.7220-01	.8150-01	.9228	.4143-02	.3028-02	.6510	4.485	534.6
294	.00000	.75000	639.00	.4510-01	.5440-01	.6120-01	.9228	.3113-02	.2291-02	.5020	3.263	530.5
294	.00000	.80000	640.00	.4910-01	.5960-01	.6740-01	.9228	.3428-02	.2497-02	.5320	3.353	536.4
294	.00000	.85000	641.00	.4680-01	.5680-01	.6430-01	.9228	.3270-02	.2378-02	.5040	3.202	537.5
294	.00000	.86000	642.00	.2000-02	.2100-02	.2200-02	.9228	.1105-03	.9916-04	.5600-01	.4360	187.9
294	.00000	.87000	643.00	.4700-01	.5710-01	.6460-01	.9228	.3284-02	.2387-02	.5050	3.274	537.8
294	.00000	.88000	644.00	.4790-01	.5810-01	.6580-01	.9228	.3346-02	.2433-02	.5150	3.368	537.7
296	.00000	.89000	645.00	.4780-01	.5750-01	.6470-01	.9228	.3290-02	.2428-02	.5370	3.564	528.6
296	.00000	.90000	646.00	.2340-01	.2610-01	.2780-01	.9228	.1414-02	.1190-02	.4340	3.180	384.5
296	.00000	.92600	648.00	.3040-01	.3660-01	.4110-01	.9228	.2088-02	.1547-02	.3460	2.547	526.2
296	.00000	.95000	649.00	.4040-01	.4860-01	.5460-01	.9228	.2777-02	.2056-02	.4580	3.373	526.9
284	5.6250	.42500	2170.0	.5790-01	.6900-01	.7720-01	.9226	.3921-02	.2941-02	.6820	4.507	516.7
284	5.6250	.43500	2178.0	.5490-01	.6540-01	.7300-01	.9226	.3712-02	.2790-02	.6510	4.306	515.3
296	11.250	.35000	650.00	.5240-01	.6280-01	.7040-01	.9223	.3581-02	.2666-02	.6070	4.135	521.7
296	11.250	.37000	652.00	.4950-01	.5920-01	.6640-01	.9223	.3378-02	.2516-02	.5740	3.907	521.4
296	11.250	.38000	654.00	.4870-01	.5820-01	.6530-01	.9223	.3318-02	.2475-02	.5670	3.873	520.5
296	11.250	.39500	657.00	.4860-01	.5810-01	.6520-01	.9223	.3314-02	.2472-02	.5670	3.873	520.3
296	11.250	.40500	659.00	.4920-01	.5890-01	.6600-01	.9223	.3357-02	.2503-02	.5730	3.929	520.5
296	11.250	.41000	660.00	.4640-01	.5540-01	.6220-01	.9223	.3161-02	.2358-02	.5410	3.696	520.2
296	11.250	.41500	661.00	.4890-01	.5850-01	.6550-01	.9223	.3331-02	.2488-02	.5730	3.903	519.4
296	11.250	.42000	662.00	.4760-01	.5690-01	.6380-01	.9223	.3244-02	.2418-02	.5530	3.776	520.9
296	11.250	.42500	663.00	.4730-01	.5660-01	.6350-01	.9223	.3228-02	.2407-02	.5510	3.777	520.6

IH72, EXTERNAL TANK CLEAN,

HU/HREF

(RVZT43)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
296	11.250	.43000	664.00	.4690-01	.5600-01	.6270-01	.9223	.3188-02	.2383-02	.5500	3.805	518.9
296	11.250	.44000	665.00	.5100-01	.6100-01	.6840-01	.9223	.3476-02	.2593-02	.5950	4.088	520.3
296	11.250	.45000	666.00	.4540-01	.5430-01	.6080-01	.9223	.3092-02	.2309-02	.5310	3.650	519.7
296	11.250	.45500	667.00	.4610-01	.5510-01	.6190-01	.9223	.3145-02	.2343-02	.5350	3.679	521.1
296	11.250	.46000	668.00	.4560-01	.5450-01	.6120-01	.9223	.3110-02	.2320-02	.5310	3.662	520.6
296	11.250	.47000	669.00	.4750-01	.5680-01	.6380-01	.9223	.3245-02	.2413-02	.5480	3.785	522.5
296	11.250	.48000	670.00	.4450-01	.5330-01	.5990-01	.9223	.3044-02	.2261-02	.5120	3.537	523.1
296	11.250	.49000	671.00	.4520-01	.5420-01	.6090-01	.9223	.3097-02	.2298-02	.5190	3.570	523.8
296	11.250	.50000	672.00	.4120-01	.4940-01	.5560-01	.9223	.2825-02	.2097-02	.4730	3.330	523.8
296	11.250	.70000	674.00	.3880-01	.4650-01	.5230-01	.9223	.2659-02	.1971-02	.4430	3.049	524.6
296	11.250	.85000	676.00	.3880-01	.4650-01	.5230-01	.9223	.2660-02	.1974-02	.4460	2.869	523.6
296	11.250	.86000	677.00	.3850-01	.4620-01	.5200-01	.9223	.2643-02	.1958-02	.4400	2.845	524.8
296	11.250	.87000	678.00	.3960-01	.4750-01	.5350-01	.9223	.2719-02	.2012-02	.4510	2.937	525.6
296	11.250	.88000	679.00	.4050-01	.4870-01	.5480-01	.9223	.2788-02	.2058-02	.4580	3.016	527.2
296	11.250	.90000	681.00	.3120-01	.3740-01	.4210-01	.9223	.2141-02	.1585-02	.3550	2.420	525.4
296	11.250	.91000	682.00	.1320-01	.1580-01	.1770-01	.9223	.8998-03	.6717-03	.1540	1.141	519.9
296	11.250	.92600	683.00	.2180-01	.2610-01	.2940-01	.9223	.1496-02	.1106-02	.2470	1.828	526.1
296	11.250	.95000	684.00	.4180-01	.5020-01	.5660-01	.9223	.2879-02	.2123-02	.4710	3.436	527.7
296	17.000	.33000	685.00	.4990-01	.5980-01	.6720-01	.9222	.3416-02	.2536-02	.5740	3.905	523.1
296	17.000	.34000	686.00	.4960-01	.5940-01	.6670-01	.9222	.3394-02	.2524-02	.5750	3.913	521.8
296	17.000	.35000	687.00	.4780-01	.5710-01	.6410-01	.9222	.3259-02	.2429-02	.5560	3.789	520.5
284	17.000	.35500	2102.0	.4950-01	.5890-01	.6590-01	.9222	.3346-02	.2514-02	.5890	3.919	514.4
296	17.000	.36000	688.00	.4630-01	.5540-01	.6210-01	.9222	.3157-02	.2356-02	.5420	3.693	519.6
296	17.000	.37000	689.00	.4690-01	.5600-01	.6290-01	.9222	.3198-02	.2384-02	.5470	3.727	520.1
296	17.000	.37500	690.00	.4650-01	.5560-01	.6230-01	.9222	.3170-02	.2367-02	.5450	3.726	519.2
284	17.000	.42500	2171.0	.4620-01	.5500-01	.6140-01	.9222	.3121-02	.2350-02	.5540	3.615	512.9
284	17.000	.43000	2176.0	.4510-01	.5350-01	.5980-01	.9222	.3040-02	.2290-02	.5410	3.580	512.5
294	17.000	.50000	691.00	.3930-01	.4730-01	.5330-01	.9222	.2707-02	.1997-02	.4440	3.015	527.2
294	17.000	.60000	692.00	.3270-01	.3950-01	.4470-01	.9222	.2270-02	.1663-02	.3630	2.357	531.5
294	17.000	.70000	693.00	.3320-01	.4010-01	.4530-01	.9222	.2302-02	.1687-02	.3680	2.515	531.4
294	17.000	.80000	694.00	.3010-01	.3650-01	.4140-01	.9222	.2102-02	.1532-02	.3290	2.082	534.6
294	17.000	.92600	696.00	.1490-01	.1800-01	.2030-01	.9222	.1034-02	.7584-03	.1660	1.224	530.8
284	20.980	.36000	2099.0	.4290-01	.5090-01	.5690-01	.9221	.2892-02	.2179-02	.5150	3.453	512.2
284	20.980	.36500	2100.0	.4200-01	.4980-01	.5560-01	.9221	.2825-02	.2132-02	.5080	3.404	510.7
284	23.070	.35500	2094.0	-.6990	-.1399	-.9670-01	.9220	-.4911-02	-.3552-01	.3330	1.979	758.1
284	23.070	.36000	2095.0	.4060-01	.4820-01	.5380-01	.9220	.2736-02	.2064-02	.4910	3.292	510.9
284	23.070	.36500	2096.0	.3930-01	.4660-01	.5210-01	.9220	.2645-02	.1997-02	.4760	3.193	510.4
283	23.070	.43500	2000.0	.4240-01	.5070-01	.5690-01	.9220	.2893-02	.2157-02	.4950	3.220	519.9
283	23.070	.56890	2001.0	.3330-01	.4000-01	.4510-01	.9220	.2294-02	.1696-02	.3800	2.630	525.5
283	23.070	.70270	2002.0	.2940-01	.3520-01	.3960-01	.9220	.2014-02	.1494-02	.3380	2.438	523.3
283	23.070	.83500	2003.0	.2950-01	.3540-01	.3980-01	.9220	.2024-02	.1502-02	.3410	2.192	522.8
283	23.070	.90000	2004.0	.2470-01	.2970-01	.3350-01	.9220	.1705-02	.1257-02	.2800	1.899	527.1
284	23.070	.92600	2154.0	.1290-01	.1540-01	.1730-01	.9220	.8780-03	.6562-03	.1520	1.097	517.7

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT43)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
294	29.800	.70000-01	700.00	.2815	.3443	.3475	.9479	.1766-01	.1431-01	2.941	19.91	544.0
294	29.800	.10000+00	701.00	.1942	.2359	.2469	.9397	.1255-01	.9869-02	2.090	13.39	537.8
294	29.800	.15000	702.00	.1081	.1305	.1428	.9294	.7256-02	.5492-02	1.196	8.622	531.8
294	29.800	.20000	703.00	.5340-01	.6420-01	.7190-01	.9235	.3655-02	.2712-02	.6030	4.055	527.3
294	29.800	.30000	704.00	.4130-01	.5000-01	.5670-01	.9220	.2883-02	.2101-02	.4530	3.231	533.9
294	29.800	.35000	705.00	.3960-01	.4780-01	.5410-01	.9220	.2752-02	.2014-02	.4390	3.027	531.7
284	29.800	.35500	2090.0	.4110-01	.4880-01	.5450-01	.9220	.2770-02	.2091-02	.4980	3.341	510.5
284	29.800	.36500	2092.0	.3730-01	.4420-01	.4930-01	.9220	.2505-02	.1894-02	.4530	3.033	509.4
284	29.800	.37000	2093.0	.3100-01	.3670-01	.4090-01	.9220	.2078-02	.1577-02	.3820	2.565	506.6
296	29.800	.50000	707.00	.3030-01	.3620-01	.4070-01	.9220	.2068-02	.1541-02	.3540	2.455	520.0
296	29.800	.60000	708.00	.3220-01	.3850-01	.4310-01	.9220	.2194-02	.1638-02	.3780	2.443	518.9
296	29.800	.70000	709.00	.2720-01	.3250-01	.3650-01	.9220	.1856-02	.1382-02	.3170	2.047	520.4
296	29.800	.80000	710.00	.2390-01	.2860-01	.3220-01	.9220	.1635-02	.1217-02	.2790	1.760	520.6
284	31.430	.44000	2166.0	.3540-01	.4190-01	.4680-01	.9220	.2377-02	.1799-02	.4320	2.926	508.6
283	31.430	.47600	2005.0	.3160-01	.3770-01	.4230-01	.9220	.2151-02	.1608-02	.3730	2.511	517.9
283	31.430	.51100	2006.0	.2740-01	.3280-01	.3690-01	.9220	.1876-02	.1394-02	.3170	2.195	522.3
283	31.430	.54600	2007.0	.1280-01	.1520-01	.1700-01	.9220	.8667-03	.6488-03	.1510	1.075	517.1
283	31.430	.61600	2009.0	.2570-01	.3070-01	.3450-01	.9220	.1754-02	.1308-02	.3010	2.087	519.7
283	31.430	.65000	2010.0	.3030-01	.3620-01	.4060-01	.9220	.2065-02	.1542-02	.3560	2.511	518.7
283	31.430	.68600	2014.0	.2490-01	.2970-01	.3340-01	.9220	.1697-02	.1264-02	.2900	2.048	520.4
283	31.430	.72050	2015.0	.1120-01	.1340-01	.1500-01	.9220	.7634-03	.5707-03	.1320	.9950	517.9
283	31.430	.79040	2017.0	.2430-01	.2900-01	.3260-01	.9220	.1658-02	.1234-02	.2820	1.809	520.7
283	31.430	.86000	2019.0	.3500-02	.4200-02	.4800-02	.9220	.2430-03	.1781-03	.3900-01	.2530	530.8
283	31.430	.89520	2020.0	.2070-01	.2490-01	.2800-01	.9220	.1425-02	.1054-02	.2370	1.556	525.1
284	31.430	.92600	2153.0	.7700-02	.9200-02	.1030-01	.9220	.5242-03	.3929-03	.9200-01	.6790	515.6
283	33.750	.25000	2079.0	.2620-01	.3150-01	.3560-01	.9220	.1811-02	.1331-02	.2940	2.434	528.9
283	33.750	.30000	2080.0	.4010-01	.4840-01	.5470-01	.9220	.2783-02	.2039-02	.4460	2.961	530.8
283	33.750	.37500	2081.0	.3490-01	.4160-01	.4660-01	.9220	.2370-02	.1775-02	.4140	2.789	516.6
283	33.750	.40000	2082.0	.3310-01	.3950-01	.4430-01	.9220	.2251-02	.1684-02	.3910	2.636	517.4
283	33.750	.43000	2083.0	.3710-01	.4420-01	.4950-01	.9220	.2517-02	.1888-02	.4420	2.983	515.5
283	33.750	.45000	2084.0	.2360-01	.2800-01	.3120-01	.9220	.1588-02	.1199-02	.2860	1.937	510.9
283	33.750	.60000	2085.0	.2470-01	.2950-01	.3310-01	.9220	.1684-02	.1255-02	.2880	1.937	520.3
284	33.750	.65000	2086.0	.2420-01	.2870-01	.3200-01	.9220	.1626-02	.1228-02	.2930	1.999	510.3
284	33.750	.92600	2152.0	.6200-02	.7400-02	.8300-02	.9220	.4213-03	.3159-03	.7400-01	.5470	515.3
283	36.320	.25000	2066.0	.3210-01	.3820-01	.4280-01	.9220	.2178-02	.1633-02	.3810	2.574	515.9
283	36.320	.35000	2069.0	.3530-01	.4210-01	.4730-01	.9220	.2407-02	.1793-02	.4110	2.768	520.3
283	36.320	.37500	2070.0	.3220-01	.3840-01	.4300-01	.9220	.2186-02	.1637-02	.3810	2.569	516.8
283	36.320	.40000	2071.0	.3140-01	.3740-01	.4180-01	.9220	.2127-02	.1596-02	.3730	2.519	515.6
283	36.320	.42000	2072.0	.3270-01	.3890-01	.4360-01	.9220	.2216-02	.1662-02	.3890	2.623	515.6
283	36.320	.42500	2073.0	.3100-01	.3690-01	.4130-01	.9220	.2102-02	.1577-02	.3690	2.489	515.6
283	36.320	.43500	2075.0	.3090-01	.3680-01	.4120-01	.9220	.2094-02	.1571-02	.3680	2.481	515.5
283	36.320	.45000	2076.0	.3560-01	.4210-01	.4690-01	.9220	.2388-02	.1808-02	.4360	2.951	508.6
283	36.320	.60000	2077.0	.2320-01	.2770-01	.3110-01	.9220	.1580-02	.1179-02	.2710	1.844	519.3

IH72. EXTERNAL TANK CLEAN. HU/HREF (RVZT43)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
283	36.320	.65000	2078.0	.2390-01	.2850-01	.3190-01	.9220	.1625-02	.1214-02	.2800	1.946	518.6
296	37.700	.50000-01	715.00	.3263	.3958	.3923	.9521	.1995-01	.1659-01	3.543	23.24	536.0
296	37.700	.70000-01	716.00	.2568	.3087	.3140	.9458	.1597-01	.1306-01	2.910	20.06	526.7
296	37.700	.10000+00	717.00	.1862	.2214	.2321	.9378	.1180-01	.9468-02	2.233	14.73	513.7
296	37.700	.15000	718.00	.1072	.1268	.1378	.9281	.7004-02	.5452-02	1.325	9.899	506.5
296	37.700	.20000	719.00	.5190-01	.6130-01	.6800-01	.9229	.3458-02	.2641-02	.6460	4.451	504.9
296	37.700	.30000	720.00	.3370-01	.4040-01	.4550-01	.9220	.2311-02	.1713-02	.3870	2.798	523.8
294	37.700	.35000	721.00	.3440-01	.4160-01	.4700-01	.9220	.2390-02	.1750-02	.3820	2.669	531.2
294	37.700	.37500	722.00	.3280-01	.3960-01	.4470-01	.9220	.2273-02	.1670-02	.3680	2.571	529.4
294	37.700	.50000	723.00	.2620-01	.3150-01	.3540-01	.9220	.1799-02	.1334-02	.3020	2.108	523.4
294	37.700	.60000	724.00	.1990-01	.2400-01	.2710-01	.9220	.1377-02	.1010-02	.2210	1.427	530.3
294	37.700	.70000	725.00	.2160-01	.2600-01	.2930-01	.9220	.1491-02	.1097-02	.2420	1.556	528.5
294	37.700	.80000	726.00	.1800-01	.2180-01	.2470-01	.9220	.1254-02	.9142-03	.1970	1.249	533.6
294	37.700	.87000	727.00	.1670-01	.2020-01	.2290-01	.9220	.1164-02	.8463-03	.1810	1.164	535.6
294	37.700	.92600	728.00	.2000-01	.2420-01	.2740-01	.9220	.1392-02	.1018-02	.2220	1.625	531.7
295	39.000	.10000-01	993.00	.4642	.5751	.5494	.9598	.2794-01	.2361-01	4.587	33.21	554.9
295	39.000	.25000-01	994.00	.4304	.5253	.5056	.9588	.2571-01	.2189-01	4.537	30.94	541.9
295	39.000	.30000-01	995.00	-.3560-01	-.2530-01	-.2660-01	.9587	-.1355-02	-.1811-02	.1670	1.010	841.3
283	45.000	.25000	2036.0	.1810-01	.2180-01	.2460-01	.9220	.1250-02	.9186-03	.2030	1.654	529.0
283	45.000	.32500	2038.0	.3630-01	.4350-01	.4890-01	.9220	.2488-02	.1846-02	.4180	2.897	523.0
283	45.000	.35000	2039.0	.3390-01	.4050-01	.4540-01	.9220	.2311-02	.1726-02	.3980	2.723	518.8
283	45.000	.37500	2040.0	.3150-01	.3760-01	.4210-01	.9220	.2141-02	.1604-02	.3740	2.560	516.5
283	45.000	.40000	2041.0	.3010-01	.3580-01	.4010-01	.9220	.2037-02	.1530-02	.3590	2.462	514.8
283	45.000	.43000	2044.0	.2750-01	.3260-01	.3650-01	.9220	.1856-02	.1398-02	.3310	2.269	512.9
283	45.000	.43500	2045.0	.2660-01	.3160-01	.3540-01	.9220	.1798-02	.1354-02	.3200	2.197	513.0
283	45.000	.44000	2046.0	.2690-01	.3190-01	.3570-01	.9220	.1814-02	.1367-02	.3240	2.224	512.4
283	45.000	.45000	2047.0	.2650-01	.3150-01	.3520-01	.9220	.1789-02	.1347-02	.3190	2.200	512.9
283	45.000	.47000	2048.0	.2570-01	.3060-01	.3420-01	.9220	.1740-02	.1306-02	.3070	2.133	514.9
283	45.000	.55000	2049.0	.1230-01	.1470-01	.1650-01	.9220	.8383-03	.6258-03	.1440	1.005	518.9
283	45.000	.60000	2050.0	.2070-01	.2470-01	.2770-01	.9220	.1411-02	.1054-02	.2430	1.662	518.8
283	45.000	.65000	2051.0	.2010-01	.2390-01	.2680-01	.9220	.1364-02	.1020-02	.2360	1.597	517.9
283	45.000	.75000	2052.0	.5500-02	.6600-02	.7300-02	.9220	.3738-03	.2791-03	.6400-01	.4160	518.6
283	45.000	.80000	2053.0	.2070-01	.2470-01	.2770-01	.9220	.1411-02	.1054-02	.2440	1.553	518.5
283	45.000	.83000	2054.0	.1370-01	.1640-01	.1840-01	.9220	.9381-03	.6987-03	.1600	1.016	520.5
283	45.000	.84000	2055.0	.1320-01	.1580-01	.1770-01	.9220	.9019-03	.6720-03	.1540	.9790	520.2
283	45.000	.85000	2056.0	.1260-01	.1510-01	.1700-01	.9220	.8623-03	.6422-03	.1470	.9470	520.5
283	45.000	.86000	2057.0	.1220-01	.1460-01	.1640-01	.9220	.8341-03	.6212-03	.1420	.9380	520.5
283	45.000	.87000	2058.0	.1310-01	.1570-01	.1760-01	.9220	.8971-03	.6675-03	.1520	1.029	521.1
283	45.000	.89000	2060.0	.2220-01	.2670-01	.3010-01	.9220	.1529-02	.1130-02	.2530	1.709	525.7
283	45.000	.90000	2061.0	.1710-01	.2050-01	.2300-01	.9220	.1171-02	.8711-03	.1990	1.350	521.3
283	45.000	.91000	2062.0	.2010-01	.2420-01	.2740-01	.9220	.1392-02	.1020-02	.2230	1.842	530.6
283	45.000	.92600	2063.0	.2300-01	.2760-01	.3110-01	.9220	.1584-02	.1168-02	.2600	1.853	527.1
283	45.000	.93500	2064.0	.3300-01	.3980-01	.4500-01	.9220	.2289-02	.1679-02	.3690	2.775	530.1

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT43)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
283	45.000	.94500	2065.0	.3520-01	.4240-01	.4790-01	.9220	.2438-02	.1792-02	.3950	2.647	529.1
294	180.00	.15000-01	2182.0	.5440	.7107	.6903	.9548	.3509-01	.2765-01	4.417	32.49	589.8
294	180.00	.20000-01	2183.0	.4375	.5491	.5385	.9538	.2737-01	.2224-01	4.102	30.86	565.1
294	180.00	.25000-01	2184.0	.3867	.4785	.4699	.9538	.2388-01	.1965-01	3.839	27.90	554.2
294	180.00	.30000-01	2185.0	.4061	.5062	.4972	.9537	.2527-01	.2064-01	3.913	28.17	560.0
294	180.00	.40000-01	737.00	.1184	.1415	.1413	.9502	.7184-02	.6020-02	1.386	9.170	519.3
294	180.00	.45000-01	738.00	.3247	.3994	.4020	.9486	.2043-01	.1650-01	3.309	21.89	549.1
294	180.00	.60000-01	739.00	.2517	.3082	.3168	.9440	.1610-01	.1279-01	2.613	17.58	545.3
294	180.00	.70000-01	740.00	.2348	.2875	.2994	.9411	.1522-01	.1193-01	2.439	16.51	545.2
294	180.00	.80000-01	741.00	.1870	.2279	.2400	.9385	.1220-01	.9505-02	1.984	14.47	540.8
294	180.00	.10000+00	742.00	.1580	.1918	.2060	.9338	.1047-01	.8031-02	1.709	11.47	536.8
294	180.00	.12500	743.00	.1101	.1333	.1461	.9291	.7426-02	.5598-02	1.209	8.847	533.6
294	180.00	.15000	744.00	.8560-01	.1033	.1149	.9256	.5842-02	.4351-02	.9510	6.663	531.1
294	180.00	.17500	745.00	.5220-01	.6280-01	.7040-01	.9233	.3580-02	.2652-02	.5880	4.462	527.8
294	180.00	.20000	746.00	.3810-01	.4560-01	.5120-01	.9221	.2603-02	.1937-02	.4420	3.204	521.3
294	180.00	.21500	747.00	.3340-01	.4030-01	.4560-01	.9220	.2320-02	.1697-02	.3690	2.577	532.0
294	180.00	.23000	748.00	.2530-01	.3050-01	.3450-01	.9220	.1755-02	.1286-02	.2810	2.094	531.0
294	180.00	.24000	749.00	.1640-01	.1980-01	.2240-01	.9220	.1137-02	.8324-03	.1820	1.381	531.3
294	180.00	.25000	750.00	.8100-02	.9700-02	.1090-01	.9220	.5547-03	.4095-03	.9100-01	.7470	526.3
294	180.00	.35000	752.00	.2560-01	.3080-01	.3480-01	.9220	.1770-02	.1300-02	.2860	1.825	529.5
294	180.00	.40000	753.00	.2350-01	.2830-01	.3200-01	.9220	.1627-02	.1196-02	.2640	1.713	528.9
294	180.00	.50000	754.00	.1920-01	.2300-01	.2600-01	.9220	.1320-02	.9737-03	.2170	1.434	526.8
294	180.00	.60000	755.00	.1360-01	.1650-01	.1870-01	.9220	.9500-03	.6912-03	.1480	.9570	534.9
294	180.00	.70000	756.00	.1160-01	.1400-01	.1580-01	.9220	.8019-03	.5887-03	.1290	.8620	529.7
294	180.00	.80000	757.00	.1910-01	.2320-01	.2630-01	.9220	.1338-02	.9729-03	.2090	1.315	535.2
294	180.00	.90000	758.00	.1880-01	.2270-01	.2560-01	.9220	.1302-02	.9561-03	.2100	1.371	529.7
294	235.00	.22000	759.00	.6320-01	.7750-01	.8780-01	.9240	.4461-02	.3213-02	.6540	4.867	546.1
294	235.00	.25000	760.00	.3490-01	.4240-01	.4800-01	.9227	.2441-02	.1773-02	.3750	2.952	530.0
294	235.00	.27000	761.00	.3490-01	.4230-01	.4790-01	.9227	.2436-02	.1774-02	.3790	2.833	536.2
294	235.00	.30000	762.00	.5610-01	.6840-01	.7760-01	.9227	.3945-02	.2851-02	.5960	3.595	540.5
294	235.00	.32000	763.00	.5670-01	.6910-01	.7840-01	.9227	.3985-02	.2881-02	.6020	3.574	540.5
294	235.00	.34000	764.00	.5770-01	.7020-01	.7960-01	.9227	.4046-02	.2933-02	.6180	3.679	538.9
294	235.00	.36000	765.00	.5530-01	.6730-01	.7630-01	.9227	.3878-02	.2812-02	.5930	3.579	538.8
294	235.00	.38000	766.00	.5260-01	.6400-01	.7250-01	.9227	.3684-02	.2674-02	.5650	3.451	538.2
296	247.00	.23000	768.00	.6880-01	.8320-01	.9340-01	.9241	.4749-02	.3497-02	.7550	5.656	533.6
296	247.00	.25000	769.00	.4060-01	.4900-01	.5510-01	.9233	.2800-02	.2062-02	.4500	3.528	531.3
296	247.00	.27000	770.00	.5410-01	.6560-01	.7410-01	.9233	.3768-02	.2750-02	.5850	4.289	536.8
296	247.00	.30000	772.00	.6420-01	.7770-01	.8760-01	.9233	.4453-02	.3266-02	.7040	4.332	533.9
296	247.00	.31000	773.00	.6540-01	.7900-01	.8890-01	.9233	.4519-02	.3325-02	.7240	4.422	531.8
296	247.00	.32000	774.00	.6480-01	.7810-01	.8780-01	.9233	.4465-02	.3294-02	.7220	4.377	530.4
296	247.00	.32500	775.00	.6720-01	.8100-01	.9100-01	.9233	.4625-02	.3414-02	.7500	4.559	530.0
296	247.00	.33000	776.00	.6490-01	.7830-01	.8790-01	.9233	.4471-02	.3302-02	.7260	4.427	529.7
296	247.00	.33500	777.00	.6770-01	.8150-01	.9150-01	.9233	.4654-02	.3440-02	.7580	4.623	529.2

IH72, EXTERNAL TANK CLEAN, HU/HREF

(RVZT43)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
296	247.00	.34000	778.00	.6460-01	.7770-01	.8720-01	.9233	.4432-02	.3285-02	.7300	4.457	527.3
296	247.00	.34500	779.00	.6320-01	.7600-01	.8530-01	.9233	.4337-02	.3214-02	.7130	4.367	527.5
296	247.00	.35000	780.00	.6420-01	.7710-01	.8640-01	.9233	.4394-02	.3262-02	.7280	4.470	526.4
294	247.00	.36000	782.00	.6110-01	.7450-01	.8430-01	.9233	.4283-02	.3107-02	.6500	3.977	540.3
294	247.00	.36500	783.00	.6060-01	.7380-01	.8350-01	.9233	.4246-02	.3080-02	.6450	3.935	540.1
294	247.00	.37000	784.00	.6110-01	.7440-01	.8420-01	.9233	.4278-02	.3108-02	.6530	4.006	539.5
294	247.00	.37500	785.00	.1200-02	.1500-02	.1700-02	.9233	.8408-04	.6202-04	.1400-01	.8400-01	530.4
294	247.00	.38000	786.00	.6330-01	.7700-01	.8710-01	.9233	.4428-02	.3218-02	.6770	4.198	539.2
294	247.00	.39000	787.00	.6590-01	.8020-01	.9070-01	.9233	.4608-02	.3350-02	.7050	4.387	539.1
294	247.00	.40000	788.00	.5570-01	.6800-01	.7700-01	.9233	.3913-02	.2832-02	.5900	3.694	541.4
295	247.00	.50000	789.00	.5840-01	.7030-01	.7890-01	.9233	.4011-02	.2972-02	.6590	4.266	527.5
295	247.00	.60000	790.00	.6100-01	.7330-01	.8200-01	.9233	.4172-02	.3104-02	.6970	4.623	524.8
295	247.00	.70000	791.00	.5750-01	.6890-01	.7700-01	.9233	.3916-02	.2923-02	.6620	4.735	522.6
295	247.00	.90000	793.00	.4340-01	.5190-01	.5790-01	.9233	.2945-02	.2206-02	.5050	3.301	520.3
284	247.00	.92600	2144.0	.3650-01	.4350-01	.4840-01	.9234	.2457-02	.1855-02	.4350	3.091	514.5
284	247.00	.93000	2149.0	.4050-01	.4840-01	.5400-01	.9234	.2744-02	.2057-02	.4710	3.452	519.6
284	250.57	.92600	2143.0	.4020-01	.4790-01	.5330-01	.9235	.2706-02	.2041-02	.4760	3.383	515.6
284	250.57	.93000	2148.0	.5050-01	.6040-01	.6740-01	.9235	.3425-02	.2564-02	.5840	4.180	521.0
295	258.00	.27000	794.00	.5830-01	.7070-01	.7950-01	.9240	.4045-02	.2963-02	.6310	4.523	536.3
295	258.00	.29000	795.00	.5440-01	.6570-01	.7360-01	.9240	.3746-02	.2767-02	.6040	3.749	531.1
295	258.00	.30000	796.00	.7470-01	.9030-01	.1013	.9240	.5154-02	.3799-02	.8230	5.026	532.5
282	258.00	.32000	798.00	.7420-01	.9010-01	.1014	.9240	.5156-02	.3772-02	.8000	4.845	537.1
282	258.00	.34000	802.00	.7070-01	.8550-01	.9600-01	.9240	.4882-02	.3595-02	.7760	4.725	533.2
282	258.00	.34500	803.00	.6970-01	.8420-01	.9450-01	.9240	.4806-02	.3542-02	.7670	4.685	532.5
282	258.00	.35500	805.00	.7040-01	.8510-01	.9560-01	.9240	.4859-02	.3579-02	.7740	4.724	532.9
282	258.00	.36000	806.00	.6750-01	.8150-01	.9140-01	.9240	.4648-02	.3434-02	.7490	4.591	531.0
282	258.00	.36500	807.00	.6890-01	.8320-01	.9320-01	.9240	.4740-02	.3505-02	.7660	4.707	530.5
282	258.00	.37000	808.00	.6850-01	.8260-01	.9260-01	.9240	.4706-02	.3482-02	.7620	4.699	530.2
282	258.00	.37500	809.00	.6880-01	.8290-01	.9290-01	.9240	.4722-02	.3496-02	.7670	4.729	529.7
282	258.00	.38000	810.00	.6750-01	.8140-01	.9110-01	.9240	.4635-02	.3431-02	.7520	4.662	529.9
295	258.00	.40000	812.00	.7040-01	.8440-01	.9410-01	.9240	.4787-02	.3579-02	.8080	5.039	523.4
284	258.00	.93500	2151.0	.5310-01	.6390-01	.7140-01	.9240	.3626-02	.2700-02	.6020	4.298	525.8
295	270.00	.40000-01	985.00	.4206	.5124	.4631	.9744	.2355-01	.2139-01	4.475	29.21	540.0
295	270.00	.50000-01	986.00	.4261	.5198	.4764	.9707	.2423-01	.2167-01	4.499	29.18	541.6
295	270.00	.60000-01	987.00	.3985	.4839	.4508	.9671	.2293-01	.2027-01	4.298	28.43	537.1
295	270.00	.70000-01	988.00	.3739	.4553	.4298	.9636	.2186+01	.1902-01	3.988	26.90	539.5
295	270.00	.80000-01	989.00	.3368	.4093	.3921	.9602	.1994-01	.1713-01	3.621	25.77	537.8
295	270.00	.10000+00	990.00	.2841	.3422	.3370	.9538	.1714-01	.1445-01	3.186	20.98	528.7
295	270.00	.15000	991.00	.1879	.2253	.2346	.9401	.1193-01	.9555-02	2.156	16.01	523.6
295	270.00	.20000	992.00	.9820-01	.1167	.1263	.9299	.6424-02	.4992-02	1.177	8.092	513.5
295	270.00	.23000	813.00	.8380-01	.1018	.1136	.9257	.5779-02	.4261-02	.9030	6.596	537.3
295	270.00	.24000	814.00	.7020-01	.8550-01	.9610-01	.9246	.4887-02	.3568-02	.7470	6.065	539.9
295	270.00	.25000	815.00	.4820-01	.5840-01	.6540-01	.9246	.3326-02	.2450-02	.5250	4.166	534.9

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT43)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
295	270.00	.27000	816.00	.5910-01	.7180-01	.8060-01	.9246	.4100-02	.3006-02	.6360	4.540	537.7
295	270.00	.29000	817.00	.6690-01	.8070-01	.9010-01	.9246	.4582-02	.3401-02	.7450	4.671	530.1
295	270.00	.30000	818.00	.7770-01	.9360-01	.1045	.9246	.5313-02	.3953-02	.8720	5.378	528.6
295	270.00	.31000	819.00	.7780-01	.9360-01	.1044	.9246	.5309-02	.3957-02	.8770	5.369	527.5
295	270.00	.32000	820.00	.7890-01	.9480-01	.1055	.9246	.5366-02	.4014-02	.9000	5.499	525.1
295	270.00	.32500	821.00	.7810-01	.9380-01	.1044	.9246	.5312-02	.3970-02	.8880	5.411	525.6
295	270.00	.33000	822.00	.7690-01	.9210-01	.1025	.9246	.5211-02	.3910-02	.8840	5.408	523.1
295	270.00	.33500	823.00	.7740-01	.9270-01	.1031	.9246	.5241-02	.3938-02	.8940	5.491	522.1
295	270.00	.34500	825.00	.8020-01	.9590-01	.1065	.9246	.5418-02	.4080-02	.9330	5.717	520.5
295	270.00	.36000	828.00	.7560-01	.9040-01	.1004	.9246	.5108-02	.3846-02	.8790	5.371	520.6
295	270.00	.36500	829.00	.7580-01	.9070-01	.1007	.9246	.5124-02	.3855-02	.8790	5.387	521.1
295	270.00	.37000	830.00	.7780-01	.9360-01	.1043	.9246	.5305-02	.3959-02	.8810	5.396	526.6
295	270.00	.37500	831.00	.7750-01	.9320-01	.1038	.9246	.5279-02	.3944-02	.8810	5.424	525.9
295	270.00	.38000	832.00	.7670-01	.9220-01	.1027	.9246	.5225-02	.3900-02	.8680	5.348	526.5
295	270.00	.39000	833.00	.7870-01	.9450-01	.1054	.9246	.5358-02	.4000-02	.8920	5.551	526.4
295	270.00	.40000	834.00	.7620-01	.9150-01	.1020	.9246	.5187-02	.3873-02	.8640	5.393	526.2
295	270.00	.50000	835.00	.7580-01	.9210-01	.1033	.9246	.5256-02	.3858-02	.8190	5.201	537.0
295	270.00	.60000	836.00	.7370-01	.8900-01	.9950-01	.9246	.5060-02	.3748-02	.8160	5.478	531.5
295	270.00	.70000	837.00	.7240-01	.8740-01	.9780-01	.9246	.4974-02	.3680-02	.7990	5.668	532.1
295	270.00	.80000	838.00	.7330-01	.8820-01	.9840-01	.9246	.5005-02	.3727-02	.8250	5.175	527.9
295	270.00	.90000	839.00	.5860-01	.7040-01	.7840-01	.9246	.3989-02	.2981-02	.6660	4.306	525.7
284	270.00	.92600	2141.0	.5390-01	.6460-01	.7190-01	.9246	.3652-02	.2739-02	.6180	4.284	523.0
284	270.00	.93000	2146.0	.6250-01	.7510-01	.8370-01	.9246	.4253-02	.3174-02	.7060	5.038	526.4
284	270.00	.93500	2150.0	.6160-01	.7410-01	.8270-01	.9246	.4203-02	.3128-02	.6900	4.919	528.2
284	289.43	.92600	2140.0	.5800-01	.6960-01	.7720-01	.9253	.3925-02	.2946-02	.6600	4.673	524.6
284	289.43	.93000	2145.0	.6470-01	.7800-01	.8670-01	.9253	.4407-02	.3290-02	.7250	5.221	528.3
295	292.50	.23000	840.00	.8550-01	.1045	.1167	.9266	.5937-02	.4348-02	.8940	7.221	543.5
295	292.50	.30000	843.00	.8940-01	.1087	.1217	.9254	.6187-02	.4546-02	.9580	5.723	538.4
295	292.50	.35000	845.00	.7970-01	.9620-01	.1072	.9254	.5453-02	.4053-02	.8830	5.454	531.4
295	292.50	.37000	846.00	.8500-01	.1026	.1142	.9254	.5807-02	.4325-02	.9480	5.893	530.0
295	292.50	.40000	847.00	.8580-01	.1033	.1149	.9254	.5844-02	.4363-02	.9620	6.052	528.6
295	292.50	.45000	848.00	.8280-01	.1000+00	.1113	.9254	.5662-02	.4211-02	.9190	5.822	531.0
295	292.50	.50000	849.00	.8410-01	.1022	.1144	.9254	.5818-02	.4275-02	.9010	5.819	538.4
295	292.50	.60000	851.00	.8240-01	.9980-01	.1113	.9254	.5663-02	.4190-02	.9010	6.077	534.2
295	292.50	.65000	852.00	.8360-01	.1011	.1127	.9254	.5732-02	.4251-02	.9200	6.306	532.7
295	292.50	.70000	853.00	.8360-01	.1016	.1136	.9254	.5779-02	.4250-02	.8980	6.332	537.9
295	292.50	.75000	854.00	.7050-01	.8540-01	.9530-01	.9254	.4845-02	.3588-02	.7730	5.046	533.8
295	292.50	.80000	855.00	.7700-01	.9290-01	.1035	.9254	.5263-02	.3914-02	.8540	5.601	531.0
284	292.50	.82000	2129.0	.8600-01	.1035	.1150	.9254	.5842-02	.4371-02	.9700	6.006	526.8
284	292.50	.83000	2130.0	.8320-01	.1001	.1112	.9254	.5653-02	.4226-02	.9360	5.838	527.4
284	292.50	.85000	2132.0	.8340-01	.1004	.1116	.9254	.5671-02	.4237-02	.9370	5.879	527.7
284	292.50	.86000	2133.0	.8340-01	.1004	.1116	.9254	.5670-02	.4237-02	.9370	5.847	527.6
284	292.50	.87000	2134.0	.8360-01	.1006	.1119	.9254	.5685-02	.4246-02	.9370	5.880	528.0

IH72, EXTERNAL TANK CLEAN, HU/HREF

(RVZT43)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
284	292.50	.88000	2135.0	.8310-01	.1000+00	.1112	.9254	.5652-02	.4220-02	.9310	5.840	528.2
284	292.50	.89000	2136.0	.8310-01	.1001	.1112	.9254	.5652-02	.4225-02	.9350	5.884	527.5
295	292.50	.90000	856.00	.6540-01	.7860-01	.8740-01	.9254	.4443-02	.3324-02	.7370	4.831	527.3
284	292.50	.92600	2138.0	.5920-01	.7110-01	.7890-01	.9254	.4008-02	.3010-02	.6750	4.777	524.5
284	292.50	.93000	2139.0	.6430-01	.7730-01	.8590-01	.9254	.4367-02	.3267-02	.7240	5.251	527.0
284	301.50	.82000	2116.0	.8220-01	.9880-01	.1098	.9254	.5578-02	.4175-02	.9270	5.738	526.8
284	301.50	.83000	2117.0	.7980-01	.9590-01	.1065	.9254	.5410-02	.4055-02	.9040	5.567	525.9
284	301.50	.83500	2118.0	.8080-01	.9710-01	.1079	.9254	.5480-02	.4107-02	.9160	5.594	525.9
284	301.50	.84000	2119.0	.8190-01	.9840-01	.1093	.9254	.5553-02	.4163-02	.9290	5.722	525.7
284	301.50	.85000	2120.0	.8220-01	.9880-01	.1096	.9254	.5568-02	.4179-02	.9350	5.779	525.0
284	301.50	.86000	2021.0	.8200-01	.9850-01	.1093	.9254	.5556-02	.4166-02	.9300	5.776	525.6
284	301.50	.87000	2122.0	.8460-01	.1016	.1128	.9254	.5734-02	.4297-02	.9580	5.931	525.9
284	301.50	.88000	2123.0	.8100-01	.9740-01	.1081	.9254	.5494-02	.4114-02	.9150	5.698	526.4
284	30 50	.89000	2124.0	.8220-01	.9880-01	.1097	.9254	.5572-02	.4179-02	.9330	5.864	525.4
284	301.50	.90000	2125.0	.6700-01	.8030-01	.8900-01	.9254	.4523-02	.3407-02	.7710	4.891	522.5
284	301.50	.92600	2127.0	.6720-01	.8070-01	.8950-01	.9254	.4547-02	.3413-02	.7650	4.846	524.7
284	301.50	.93500	2128.0	.7230-01	.8700-01	.9670-01	.9254	.4914-02	.3672-02	.8120	5.526	527.7
284	305.40	.82000	2113.0	.8230-01	.9900-01	.1099	.9254	.5586-02	.4182-02	.9290	5.723	526.5
284	305.40	.83000	2114.0	.8290-01	.9960-01	.1105	.9254	.5617-02	.4213-02	.9420	5.802	525.3
284	305.40	.83500	2115.0	.8020-01	.9640-01	.1070	.9254	.5439-02	.4075-02	.9070	5.636	526.1
295	305.40	.84000	857.00	.7990-01	.9630-01	.1070	.9254	.5444-02	.4065-02	.8970	5.597	528.5
282	305.40	.86000	859.00	.7810-01	.9450-01	.1054	.9254	.5359-02	.3973-02	.8590	5.422	532.9
282	305.40	.87000	860.00	.7790-01	.9440-01	.1053	.9254	.5357-02	.3961-02	.8500	5.373	534.6
282	305.40	.88000	861.00	.7920-01	.9590-01	.1069	.9254	.5438-02	.4027-02	.8680	5.490	533.6
282	305.40	.89000	862.00	.7810-01	.9440-01	.1053	.9254	.5356-02	.3969-02	.8570	5.452	533.2
282	305.40	.90000	863.00	.7280-01	.8790-01	.9790-01	.9254	.4980-02	.3704-02	.8080	5.176	531.0
282	305.40	.91000	864.00	.5160-01	.6190-01	.6870-01	.9254	.3495-02	.2623-02	.5880	4.323	525.0
282	305.40	.92600	865.00	.6050-01	.7310-01	.8140-01	.9254	.4140-02	.3078-02	.6710	4.902	531.1
282	309.30	.81000	867.00	.8570-01	.1038	.1158	.9253	.5890-02	.4359-02	.9380	5.904	533.8
282	309.30	.83000	869.00	.6530-01	.7890-01	.8800-01	.9253	.4474-02	.3321-02	.7210	4.551	532.0
282	315.00	.50000-01	871.00	.4437	.5451	.4943	.9725	.2513-01	.2256-01	4.541	29.02	547.8
282	315.00	.60000-01	872.00	.4075	.5001	.4606	.9689	.2342-01	.2072-01	4.195	27.86	546.7
295	315.00	.70000-01	873.00	.3887	.4736	.4439	.9653	.2258-01	.1977-01	4.132	28.20	540.2
295	315.00	.80000-01	874.00	.3390	.4113	.3914	.9619	.1991-01	.1724-01	3.675	26.09	536.1
295	315.00	.10000+00	875.00	.2996	.3616	.3537	.9554	.1799-01	.1524-01	3.329	22.03	530.8
295	315.00	.15000	876.00	.1944	.2340	.2426	.9413	.1234-01	.9887-02	2.189	16.17	527.9
295	315.00	.20000	877.00	.1190	.1420	.1534	.9308	.7801-02	.6051-02	1.399	9.572	518.0
295	315.00	.35000	878.00	.8940-01	.1078	.1202	.9252	.6111-02	.4546-02	.9950	6.236	530.3
295	315.00	.40000	879.00	.8350-01	.1007	.1121	.9252	.5702-02	.4249-02	.9350	5.980	529.1
295	315.00	.50000	880.00	.7540-01	.9150-01	.1024	.9252	.5210-02	.3834-02	.8140	5.618	536.9
295	315.00	.55000	881.00	.6540-01	.7930-01	.8860-01	.9252	.4506-02	.3327-02	.7130	4.778	534.9
295	315.00	.60000	882.00	.8050-01	.9730-01	.1085	.9252	.5518-02	.4093-02	.8880	6.014	532.2
295	315.00	.65000	883.00	.8520-01	.1028	.1147	.9252	.5833-02	.4331-02	.9430	6.487	531.4

IH72, EXTERNAL TANK CLEAN. HU/HREF (RVZT43)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
295	315.00	.70000	884.00	.7580-01	.9180-01	.1025	.9252	.5212-02	.3858-02	.8320	5.955	533.5
295	315.00	.75000	885.00	.7050-01	.8510-01	.9490-01	.9252	.4828-02	.3583-02	.7790	4.948	531.8
295	315.00	.80000	886.00	.7480-01	.9010-01	.1002	.9252	.5096-02	.3805-02	.8420	5.345	527.9
295	315.00	.84000	887.00	.7670-01	.9220-01	.1025	.9252	.5215-02	.3902-02	.8690	5.519	526.5
282	315.00	.85000	888.00	.7530-01	.9090-01	.1014	.9252	.5154-02	.3830-02	.8350	5.336	531.0
282	315.00	.87000	890.00	.7570-01	.9150-01	.1020	.9252	.5188-02	.3851-02	.8380	5.366	531.6
282	315.00	.88000	891.00	.7210-01	.8720-01	.9730-01	.9252	.4946-02	.3666-02	.7940	5.116	532.4
282	315.00	.89000	892.00	.7210-01	.8710-01	.9710-01	.9252	.4935-02	.3666-02	.7990	5.240	531.1
282	315.00	.90000	893.00	.6380-01	.7690-01	.8570-01	.9252	.4356-02	.3245-02	.7130	4.736	529.3
282	315.00	.91000	894.00	.4540-01	.5450-01	.6050-01	.9252	.3075-02	.2309-02	.5200	3.837	523.9
282	315.00	.92600	895.00	.5790-01	.6990-01	.7790-01	.9252	.3959-02	.2942-02	.6420	4.708	530.8
282	322.30	.42000	897.00	.8760-01	.1058	.1182	.9249	.6012-02	.4453-02	.9660	6.255	532.2
282	322.30	.43500	898.00	.7460-01	.9010-01	.1007	.9249	.5120-02	.3791-02	.8220	5.173	532.4
282	322.30	.45000	899.00	.7740-01	.9370-01	.1048	.9249	.5329-02	.3937-02	.8470	5.582	533.8
282	322.30	.50000	900.00	.7550-01	.9190-01	.1031	.9249	.5242-02	.3841-02	.8090	5.409	538.5
282	322.30	.60000	901.00	.7460-01	.9040-01	.1011	.9249	.5139-02	.3794-02	.8150	5.450	534.2
282	322.30	.70000	902.00	.6840-01	.8290-01	.9280-01	.9249	.4720-02	.3480-02	.7450	5.115	535.0
284	324.45	.41000	2110.0	.8410-01	.1010	.1124	.9248	.5712-02	.4272-02	.9540	6.078	525.4
284	324.45	.92600	2164.0	.5560-01	.6660-01	.7390-01	.9248	.3754-02	.2826-02	.6430	4.634	521.1
284	326.85	.40000	2107.0	.9500-02	.1150-01	.1280-01	.9247	.6514-03	.4822-03	.1050	.6650	531.7
284	326.85	.40500	2108.0	.7960-01	.9540-01	.1061	.9247	.5389-02	.4042-02	.9120	5.818	523.1
283	326.85	.44000	2021.0	.7540-01	.9110-01	.1019	.9247	.5181-02	.3834-02	.8330	5.331	532.4
283	326.85	.54600	2024.0	.3830-01	.4640-01	.5190-01	.9247	.2641-02	.1946-02	.4170	2.812	535.2
283	326.85	.58100	2025.0	.6940-01	.8430-01	.9470-01	.9247	.4814-02	.3527-02	.7450	5.236	538.3
283	326.85	.61600	2026.0	.6760-01	.8190-01	.9170-01	.9247	.4666-02	.3435-02	.7350	5.142	535.5
283	326.85	.65200	2027.0	.6890-01	.8330-01	.9320-01	.9247	.4738-02	.3505-02	.7610	5.326	532.6
283	326.85	.68600	2028.0	.6950-01	.8420-01	.9420-01	.9247	.4791-02	.3536-02	.7620	5.384	534.0
283	326.85	.72260	2029.0	.5780-01	.6990-01	.7810-01	.9247	.3974-02	.2938-02	.6370	4.470	533.0
283	326.85	.75790	2030.0	.4700-01	.5680-01	.6350-01	.9247	.3230-02	.2391-02	.5200	3.350	532.1
283	326.85	.79310	2031.0	.7540-01	.9120-01	.1021	.9247	.5192-02	.3834-02	.8270	5.218	533.8
283	326.85	.82830	2032.0	.7700-01	.9310-01	.1042	.9247	.5302-02	.3914-02	.8440	5.372	533.9
283	326.85	.86350	2033.0	.7920-01	.9570-01	.1070	.9247	.5440-02	.4026-02	.8760	5.530	532.1
283	326.85	.90000	2034.0	.8270-01	.9990-01	.1117	.9247	.5682-02	.4205-02	.9130	5.716	532.4
284	326.85	.92600	2163.0	.5490-01	.6570-01	.7300-01	.9247	.3709-02	.2792-02	.6370	4.585	520.7
283	326.85	.93390	2035.0	.6600-01	.7980-01	.8930-01	.9247	.4543-02	.3355-02	.7240	4.884	533.8
284	330.20	.40000	2104.0	.8440-01	.1014	.1129	.9245	.5739-02	.4291-02	.9610	6.127	524.7
284	330.20	.40500	2105.0	.8320-01	.9980-01	.1111	.9245	.5645-02	.4229-02	.9520	6.074	523.6
284	330.20	.41000	2106.0	.7880-01	.9460-01	.1053	.9245	.5350-02	.4005-02	.9010	5.726	523.9
282	330.20	.42000	905.00	.7650-01	.9220-01	.1030	.9245	.5236-02	.3888-02	.8540	5.556	529.4
282	330.20	.43500	906.00	.7250-01	.8760-01	.9790-01	.9245	.4978-02	.3688-02	.8050	5.260	530.9
282	330.20	.45000	907.00	.7200-01	.8700-01	.9740-01	.9245	.4951-02	.3659-02	.7930	5.213	532.4
282	330.20	.50000	908.00	.6790-01	.8240-01	.9250-01	.9245	.4703-02	.3452-02	.7340	5.281	536.4
282	330.20	.60000	909.00	.7310-01	.8840-01	.9900-01	.9245	.5033-02	.3715-02	.8020	5.282	533.3

IH72, EXTERNAL TANK CLEAN, HU/HREF

(RVZT43)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
282	330.20	.70000	910.00	.7200-01	.8710-01	.9750-01	.9245	.4960-02	.3659-02	.7890	5.358	533.4
282	330.20	.80000	911.00	.5720-01	.6920-01	.7740-01	.9245	.3934-02	.2910-02	.6330	4.087	531.7
282	330.20	.87000	912.00	.1000-01	.1210-01	.1350-01	.9245	.6867-03	.5077-03	.1100	.7090	532.2
284	330.20	.92600	2162.0	.5150-01	.6150-01	.6840-01	.9245	.3474-02	.2615-02	.5980	4.292	520.2
284	334.98	.92600	2161.0	.5220-01	.6250-01	.6950-01	.9243	.3531-02	.2655-02	.6070	4.344	520.2
282	334.98	.93500	913.00	.2590-01	.3120-01	.3490-01	.9243	.1773-02	.1316-02	.2900	2.127	528.8
282	334.98	.94500	914.00	.2920-01	.3500-01	.3900-01	.9243	.1984-02	.1482-02	.3330	2.421	524.8
282	337.50	.40000-01	915.00	.4645	.5697	.5170	.9725	.2629-01	.2362-01	4.789	30.36	546.3
282	337.50	.50000-01	916.00	.4284	.5240	.4834	.9689	.2458-01	.2178-01	4.471	28.87	543.9
282	337.50	.70000-01	918.00	.1122	.1321	.1268	.9618	.6447-02	.5703-02	1.414	10.06	501.2
282	337.50	.80000-01	919.00	.3326	.4030	.3890	.9585	.1978-01	.1691-01	3.622	24.87	534.9
282	337.50	.10000+00	920.00	.2779	.3344	.3315	.9522	.1686-01	.1413-01	3.130	21.12	527.6
282	337.50	.15000	921.00	.1819	.2186	.2289	.9387	.1164-01	.9252-02	2.069	15.15	525.5
282	337.50	.20000	922.00	.1056	.1262	.1374	.9290	.6987-02	.5371-02	1.235	8.340	519.2
282	337.50	.42000	923.00	.6730-01	.8110-01	.9070-01	.9241	.4614-02	.3420-02	.7520	4.949	529.3
284	337.50	.42500	2167.0	.7370-01	.8830-01	.9840-01	.9241	.5001-02	.3743-02	.8450	5.519	522.9
282	337.50	.43500	924.00	.7230-01	.8730-01	.9770-01	.9241	.4969-02	.3677-02	.8030	5.300	530.6
282	337.50	.85000	926.00	.6410-01	.7710-01	.8620-01	.9241	.4384-02	.3260-02	.7230	4.724	527.3
282	337.50	.86000	927.00	.6550-01	.7880-01	.8800-01	.9241	.4477-02	.3329-02	.7380	4.832	527.5
282	337.50	.87000	928.00	.6560-01	.7900-01	.8820-01	.9241	.4487-02	.3338-02	.7410	4.868	527.1
282	337.50	.88000	929.00	.3070-01	.3630-01	.4010-01	.9241	.2039-02	.1560-02	.3780	2.525	506.8
282	337.50	.89000	930.00	.6520-01	.7850-01	.8790-01	.9241	.4470-02	.3313-02	.7280	4.834	529.4
282	337.50	.90000	931.00	.5890-01	.7090-01	.7930-01	.9241	.4032-02	.2995-02	.6620	4.504	528.1
282	337.50	.91000	932.00	.4140-01	.4960-01	.5530-01	.9241	.2811-02	.2106-02	.4770	3.534	522.6
295	337.50	.92600	933.00	.5100-01	.6100-01	.6800-01	.9241	.3457-02	.2592-02	.5890	4.349	522.0
295	343.12	.41500	934.00	.7630-01	.9140-01	.1020	.9238	.5186-02	.3879-02	.8790	5.773	522.6
295	343.12	.42000	935.00	.7330-01	.8790-01	.9820-01	.9238	.4994-02	.3730-02	.8410	5.571	523.6
295	343.12	.42500	936.00	.6740-01	.8080-01	.9010-01	.9238	.4582-02	.3430-02	.7790	5.180	522.0
295	343.12	.44500	939.00	.6570-01	.7880-01	.8800-01	.9238	.4474-02	.3340-02	.7530	5.059	523.8
295	343.12	.45000	940.00	.6460-01	.7740-01	.8650-01	.9238	.4397-02	.3283-02	.7400	4.973	523.8
295	343.12	.50000	941.00	.6460-01	.7790-01	.8740-01	.9238	.4446-02	.3284-02	.7170	4.903	530.8
295	343.12	.60000	942.00	.6850-01	.8220-01	.9190-01	.9238	.4676-02	.3482-02	.7790	5.075	525.6
295	343.12	.80000	944.00	.6340-01	.7610-01	.8500-01	.9238	.4324-02	.3224-02	.7240	4.773	524.8
284	345.56	.42500	2168.0	.6880-01	.8230-01	.9190-01	.9236	.4669-02	.3496-02	.7960	5.199	521.2
284	345.56	.92600	2160.0	.4630-01	.5520-01	.6140-01	.9238	.3122-02	.2351-02	.5430	3.893	517.8
295	348.00	.35000	945.00	.7010-01	.8390-01	.9380-01	.9235	.4770-02	.3563-02	.8070	5.180	522.6
295	348.00	.36000	946.00	.6890-01	.8260-01	.9230-01	.9235	.4693-02	.3505-02	.7940	5.109	522.7
295	348.00	.37000	947.00	.6880-01	.8230-01	.9180-01	.9235	.4671-02	.3497-02	.7980	5.152	521.1
282	348.00	.37500	948.00	.6710-01	.8080-01	.9050-01	.9235	.4602-02	.3413-02	.7570	4.874	527.3
282	348.00	.38000	949.00	.6730-01	.8100-01	.9080-01	.9235	.4616-02	.3423-02	.7590	4.932	527.3
282	348.00	.38500	950.00	.6760-01	.8140-01	.9120-01	.9235	.4636-02	.3439-02	.7640	4.974	527.1
282	348.00	.39000	951.00	.6730-01	.8100-01	.9080-01	.9235	.4617-02	.3425-02	.7600	4.978	527.2
282	348.00	.39500	952.00	.7000-01	.8420-01	.9430-01	.9235	.4797-02	.3558-02	.7890	5.097	527.2

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT43)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
282	348.00	.40000	953.00	.6610-01	.7950-01	.8910-01	.9235	.4528-02	.3362-02	.7480	4.918	526.5
282	348.00	.40500	954.00	.5320-01	.6440-01	.7260-01	.9235	.3692-02	.2703-02	.5790	3.798	535.0
282	348.00	.41000	955.00	.6880-01	.8280-01	.9270-01	.9235	.4716-02	.3497-02	.7760	5.110	527.3
282	348.00	.42000	957.00	.6540-01	.7870-01	.8820-01	.9235	.4487-02	.3326-02	.7370	4.883	527.6
282	348.00	.42500	958.00	.6710-01	.8080-01	.9070-01	.9235	.4611-02	.3412-02	.7520	4.980	528.7
282	348.00	.43000	959.00	.6340-01	.7630-01	.8550-01	.9235	.4349-02	.3225-02	.7150	4.722	527.5
282	348.00	.44000	960.00	.6480-01	.7800-01	.8730-01	.9235	.4440-02	.3296-02	.7330	4.862	526.6
282	348.00	.44500	961.00	.6330-01	.7630-01	.8550-01	.9235	.4348-02	.3221-02	.7120	4.720	528.0
282	348.00	.85000	968.00	.6340-01	.7620-01	.8530-01	.9235	.4335-02	.3224-02	.7210	4.727	525.5
282	348.00	.86000	969.00	.5350-01	.6430-01	.7200-01	.9235	.3659-02	.2720-02	.6070	3.991	525.9
283	348.00	.89000	972.00	.5840-01	.7050-01	.7910-01	.9235	.4025-02	.2969-02	.6490	4.345	531.0
283	348.00	.91000	974.00	.3540-01	.4260-01	.4760-01	.9235	.2423-02	.1802-02	.4030	2.971	525.9
284	352.20	.93700	2089.0	.4320-01	.5150-01	.5750-01	.9232	.2922-02	.2194-02	.5060	3.589	518.3
284	354.00	.42500	2169.0	.6630-01	.7920-01	.8850-01	.9231	.4496-02	.3370-02	.7740	5.064	519.0
284	354.00	.43000	2174.0	.6340-01	.7580-01	.8460-01	.9231	.4301-02	.3220-02	.7370	4.817	519.9
284	354.00	.43500	2177.0	.6210-01	.7410-01	.8270-01	.9231	.4205-02	.3154-02	.7270	4.753	518.4
284	354.00	.44000	2179.0	.6230-01	.7440-01	.8310-01	.9231	.4223-02	.3165-02	.7270	4.753	519.1
284	355.16	.92600	2158.0	.3640-01	.4350-01	.4860-01	.9231	.2468-02	.1850-02	.4260	3.099	518.7

EXTERNAL TANK

PARAMETRIC DATA

ALPHA = .0000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
276	-.1000-01	-9.000	4.020	71.90	748.0	176.6	.4610	5.215	2618.	.2190-03	.1422-06	4.031
277	-.1000-01	-9.000	4.020	71.80	748.0	176.8	.4610	5.210	2619.	.2185-03	.1424-06	4.020
278	-.1000-01	-9.000	4.020	71.80	748.0	176.8	.4600	5.205	2619.	.2184-03	.1423-06	4.018
288	-.1000-01	-9.000	4.020	71.90	752.0	177.6	.4610	5.220	2625.	.2179-03	.1430-06	4.000
289	-.1000-01	-9.000	4.020	71.90	751.0	177.5	.4610	5.217	2625.	.2180-03	.1429-06	4.002
290	-.1000-01	-9.000	4.020	71.80	751.0	177.4	.4610	5.210	2624.	.2178-03	.1428-06	4.001

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
276	.5084-01	.1145-01
277	.5083-01	.1147-01
278	.5080-01	.1147-01
288	.5090-01	.1149-01
289	.5089-01	.1149-01
290	.5085-01	.1149-01

TEST DATA

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TH DEG. R
289	.00000	.25000-01	2187.0	.4200	.5592	.5175	.9621	.2634-01	.2137-01	3.225	22.18	600.4
288	.00000	.40000-01	600.00	.3442	.4383	.4193	.9583	.2134-01	.1752-01	3.068	19.44	576.7
288	.00000	.50000-01	601.00	.3482	.4402	.4293	.9548	.2185-01	.1772-01	3.186	20.29	572.0
288	.00000	.70000-01	603.00	.2752	.3418	.3445	.9484	.1754-01	.1401-01	2.704	18.34	558.7
288	.00000	.80000-01	604.00	.2660	.3283	.3355	.9454	.1708-01	.1354-01	2.682	17.39	553.7
288	.00000	.15000	606.00	.1174	.1407	.1531	.9296	.7793-02	.5977-02	1.358	9.983	524.6
288	.00000	.20000	607.00	.6890-01	.8200-01	.9110-01	.9235	.4637-02	.3507-02	.8270	5.483	515.9
288	.00000	.21000	608.00	.5600-01	.6730-01	.7560-01	.9229	.3847-02	.2853-02	.6400	4.469	527.3
288	.00000	.22000	609.00	.4650-01	.5580-01	.6280-01	.9224	.3197-02	.2367-02	.5320	3.996	527.1
288	.00000	.30000	610.00	.4000-01	.4810-01	.5420-01	.9220	.2759-02	.2035-02	.4550	3.145	528.2
288	.00000	.35000	611.00	.1000-02	.1200-02	.1400-02	.9220	.7000-04	.5135-04	.1100-01	.7600-01	531.7
288	.00000	.36000	612.00	.3880-01	.4630-01	.5190-01	.9220	.2640-02	.1977-02	.4620	3.148	518.3

1H72, EXTERNAL TANK CLEAN, HU/HREF (RVZT44)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
288	.00000	.37500	614.00	.3920-01	.4680-01	.5240-01	.9220	.2667-02	.1998-02	.4670	3.183	518.1
290	.00000	.38000	615.00	.3670-01	.4400-01	.4960-01	.9220	.2520-02	.1866-02	.4210	2.859	525.3
290	.00000	.38500	616.00	.3660-01	.4400-01	.4950-01	.9220	.2516-02	.1863-02	.4210	2.859	525.1
290	.00000	.39000	617.00	.2000-03	.3000-03	.3000-03	.9220	.1727-04	.1268-04	.3000-02	.1900-01	530.4
290	.00000	.39500	618.00	.4000-01	.4790-01	.5400-01	.9220	.2744-02	.2032-02	.4590	3.125	525.1
290	.00000	.40000	619.00	.3770-01	.4520-01	.5090-01	.9220	.2587-02	.1915-02	.4320	2.927	525.3
290	.00000	.40500	620.00	.3760-01	.4500-01	.5050-01	.9220	.2569-02	.1912-02	.4380	2.980	521.8
290	.00000	.41000	621.00	.3980-01	.4760-01	.5350-01	.9220	.2719-02	.2021-02	.4610	3.138	522.6
290	.00000	.41500	622.00	.3910-01	.4690-01	.5270-01	.9220	.2682-02	.1990-02	.4520	3.063	523.8
290	.00000	.43000	625.00	.3640-01	.4350-01	.4890-01	.9220	.2485-02	.1851-02	.4250	2.891	521.4
290	.00000	.44000	626.00	.3490-01	.4170-01	.4680-01	.9220	.2381-02	.1775-02	.4090	2.784	520.6
290	.00000	.44500	627.00	.3450-01	.4120-01	.4630-01	.9220	.2354-02	.1754-02	.4030	2.772	520.9
290	.00000	.45000	628.00	.3360-01	.4020-01	.4510-01	.9220	.2292-02	.1710-02	.3940	2.709	520.3
290	.00000	.45500	629.00	.3290-01	.3930-01	.4410-01	.9220	.2241-02	.1671-02	.3850	2.686	520.6
288	.00000	.46000	630.00	.3530-01	.4200-01	.4710-01	.9220	.2396-02	.1795-02	.4200	2.864	517.9
288	.00000	.47000	631.00	.3520-01	.4200-01	.4710-01	.9220	.2395-02	.1793-02	.4190	2.855	518.4
288	.00000	.48000	632.00	.3490-01	.4170-01	.4680-01	.9220	.2384-02	.1778-02	.4100	2.812	521.0
288	.00000	.49000	633.00	.3360-01	.4010-01	.4490-01	.9220	.2286-02	.1711-02	.3980	2.758	518.9
288	.00000	.50000	634.00	.2790-01	.3320-01	.3720-01	.9220	.1893-02	.1420-02	.3330	2.364	517.3
288	.00000	.55000	635.00	.2540-01	.3020-01	.3380-01	.9220	.1722-02	.1294-02	.3050	2.060	515.8
288	.00000	.60000	636.00	.3340-01	.3980-01	.4460-01	.9220	.2271-02	.1701-02	.3980	2.602	518.0
288	.00000	.65000	637.00	.3480-01	.4150-01	.4640-01	.9220	.2361-02	.1773-02	.4170	2.741	516.4
288	.00000	.70000	638.00	.3350-01	.3990-01	.4470-01	.9220	.2273-02	.1705-02	.4000	2.778	517.3
288	.00000	.75000	639.00	.2070-01	.2450-01	.2740-01	.9220	.1394-02	.1052-02	.2510	1.648	512.9
288	.00000	.80000	640.00	.2860-01	.3390-01	.3790-01	.9220	.1930-02	.1455-02	.3460	2.206	513.7
288	.00000	.85000	641.00	.2800-01	.3320-01	.3720-01	.9220	.1891-02	.1425-02	.3390	2.180	513.8
288	.00000	.86000	642.00	.2400-02	.2500-02	.2700-02	.9220	.1352-03	.1211-03	.6800-01	.5310	190.7
288	.00000	.87000	643.00	.3010-01	.3580-01	.4000-01	.9220	.2036-02	.1531-02	.3620	2.372	515.4
288	.00000	.88000	644.00	.3150-01	.3750-01	.4190-01	.9220	.2135-02	.1604-02	.3780	2.500	516.0
290	.00000	.89000	645.00	.3090-01	.3700-01	.4150-01	.9220	.2111-02	.1572-02	.3600	2.403	521.5
290	.00000	.90000	646.00	.1820-01	.2000-01	.2120-01	.9220	.1080-02	.9261-03	.3810	2.857	339.8
290	.00000	.92600	648.00	.2630-01	.3140-01	.3520-01	.9220	.1789-02	.1339-02	.3120	2.306	518.1
290	.00000	.95000	649.00	.4270-01	.5090-01	.5710-01	.9220	.2905-02	.2169-02	.5010	3.708	519.6
278	5.6250	.42500	2170.0	.3620-01	.4340-01	.4880-01	.9220	.2481-02	.1840-02	.4160	2.739	522.3
278	5.6250	.43500	2178.0	.3240-01	.3880-01	.4360-01	.9220	.2213-02	.1647-02	.3750	2.476	520.3
290	11.250	.35000	650.00	.3300-01	.3960-01	.4450-01	.9220	.2264-02	.1678-02	.3790	2.578	524.7
290	11.250	.37000	652.00	.3350-01	.4010-01	.4510-01	.9220	.2294-02	.1702-02	.3860	2.625	524.0
290	11.250	.38000	654.00	.3380-01	.4050-01	.4550-01	.9220	.2312-02	.1719-02	.3920	2.677	522.6
290	11.250	.39500	657.00	.3280-01	.3920-01	.4400-01	.9220	.2239-02	.1665-02	.3810	2.599	522.2
290	11.250	.40500	659.00	.3290-01	.3940-01	.4430-01	.9220	.2251-02	.1674-02	.3830	2.619	522.3
290	11.250	.41000	660.00	.3170-01	.3790-01	.4260-01	.9220	.2167-02	.1613-02	.3690	2.519	522.0
290	11.250	.41500	661.00	.3280-01	.3920-01	.4400-01	.9220	.2239-02	.1667-02	.3830	2.604	521.4
290	11.250	.42000	662.00	.3380-01	.4050-01	.4550-01	.9220	.2313-02	.1720-02	.3930	2.682	522.4

IH72, AEDC VKF A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, EXTERNAL TANK CLEAN, HU/HREF

(RVZT44)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
290	11.250	.42500	663.00	.3250-01	.3890-01	.4360-01	.9220	.2219-02	.1651-02	.3780	2.588	521.9
290	11.250	.43000	664.00	.3060-01	.3650-01	.4100-01	.9220	.2084-02	.1555-02	.3590	2.481	520.2
290	11.250	.44000	665.00	.3200-01	.3830-01	.4300-01	.9220	.2184-02	.1627-02	.3730	2.566	521.3
290	11.250	.45000	666.00	.2940-01	.3510-01	.3940-01	.9220	.2001-02	.1493-02	.3450	2.370	520.0
290	11.250	.45500	667.00	.2950-01	.3530-01	.3960-01	.9220	.2015-02	.1502-02	.3450	2.373	520.9
290	11.250	.46000	668.00	.2890-01	.3450-01	.3870-01	.9220	.1968-02	.1468-02	.3380	2.334	520.3
290	11.250	.47000	669.00	.3040-01	.3630-01	.4080-01	.9220	.2075-02	.1546-02	.3550	2.455	521.1
290	11.250	.48000	670.00	.2940-01	.3520-01	.3950-01	.9220	.2009-02	.1495-02	.3420	2.365	521.9
290	11.250	.49000	671.00	.2640-01	.3160-01	.3550-01	.9220	.1803-02	.1342-02	.3070	2.118	521.8
290	11.250	.50000	672.00	.2500-01	.2990-01	.3350-01	.9220	.1705-02	.1272-02	.2930	2.062	520.6
290	11.250	.70000	674.00	.2230-01	.2660-01	.2980-01	.9220	.1516-02	.1134-02	.2630	1.816	518.6
290	11.250	.85000	676.00	.3240-01	.3860-01	.4320-01	.9220	.2194-02	.1647-02	.3870	2.498	516.0
290	11.250	.86000	677.00	.3370-01	.4020-01	.4500-01	.9220	.2289-02	.1715-02	.4010	2.602	517.1
290	11.250	.87000	678.00	.3760-01	.4480-01	.5020-01	.9220	.2552-02	.1910-02	.4450	2.909	518.0
290	11.250	.88000	679.00	.3820-01	.4560-01	.5110-01	.9220	.2599-02	.1941-02	.4490	2.973	519.3
290	11.250	.90000	681.00	.3310-01	.3940-01	.4410-01	.9220	.2241-02	.1681-02	.3940	2.700	516.3
290	11.250	.91000	682.00	.2170-01	.2570-01	.2870-01	.9220	.1458-02	.1102-02	.2650	1.966	510.7
290	11.250	.92600	683.00	.3160-01	.3760-01	.4210-01	.9220	.2141-02	.1607-02	.3770	2.805	516.0
290	11.250	.95000	684.00	.4030-01	.4810-01	.5400-01	.9220	.2743-02	.2047-02	.4720	3.459	520.0
290	17.000	.33000	685.00	.3430-01	.4120-01	.4640-01	.9220	.2358-02	.1745-02	.3930	2.669	525.6
290	17.000	.34000	686.00	.3350-01	.4020-01	.4520-01	.9220	.2298-02	.1703-02	.3860	2.622	524.4
290	17.000	.35000	687.00	.3380-01	.4050-01	.4550-01	.9220	.2312-02	.1718-02	.3910	2.662	523.0
278	17.000	.35500	2102.0	.3230-01	.3860-01	.4340-01	.9220	.2207-02	.1639-02	.3720	2.465	521.4
290	17.000	.36000	688.00	.3130-01	.3750-01	.4210-01	.9220	.2141-02	.1593-02	.3650	2.485	521.7
290	17.000	.37000	689.00	.3160-01	.3780-01	.4240-01	.9220	.2157-02	.1605-02	.3670	2.500	522.0
290	17.000	.37500	690.00	.2990-01	.3580-01	.4020-01	.9220	.2043-02	.1522-02	.3490	2.386	521.2
278	17.000	.42500	2171.0	.3060-01	.3650-01	.4100-01	.9220	.2081-02	.1554-02	.3580	2.330	517.8
278	17.000	.43000	2176.0	.2980-01	.3560-01	.3990-01	.9220	.2029-02	.1516-02	.3500	2.313	517.3
288	17.000	.50000	691.00	.2930-01	.3470-01	.3870-01	.9220	.1972-02	.1492-02	.3600	2.462	510.8
288	17.000	.60000	692.00	.3280-01	.3870-01	.4310-01	.9220	.2195-02	.1668-02	.4070	2.679	507.6
288	17.000	.70000	693.00	.1900-01	.2240-01	.2500-01	.9220	.1272-02	.9651-03	.2340	1.621	508.8
288	17.000	.80000	694.00	.2720-01	.3210-01	.3570-01	.9220	.1817-02	.1384-02	.3400	2.183	505.9
288	17.000	.92600	696.00	.3310-01	.3920-01	.4370-01	.9220	.2225-02	.1684-02	.4060	3.027	510.7
278	20.980	.36000	2099.0	.2970-01	.3550-01	.3980-01	.9220	.2024-02	.1508-02	.3450	2.304	519.4
278	20.980	.36500	2100.0	.2860-01	.3410-01	.3830-01	.9220	.1944-02	.1451-02	.3340	2.231	518.1
278	23.070	.35500	2094.0	.9750-01	.2076	.5650	.9220	.2871-01	.4951-02	.3490	2.156	677.7
278	23.070	.36000	2095.0	.2870-01	.3420-01	.3840-01	.9220	.1952-02	.1457-02	.3350	2.240	518.1
278	23.070	.36500	2096.0	.2720-01	.3250-01	.3640-01	.9220	.1850-02	.1382-02	.3190	2.131	517.5
277	23.070	.43500	2000.0	.2970-01	.3540-01	.3970-01	.9220	.2017-02	.1511-02	.3510	2.288	515.9
277	23.070	.56890	2001.0	.2000-01	.2390-01	.2670-01	.9220	.1359-02	.1017-02	.2360	1.637	516.7
277	23.070	.70270	2002.0	.1630-01	.1940-01	.2170-01	.9220	.1105-02	.8309-03	.1950	1.417	513.2
277	23.070	.83500	2003.0	.2940-01	.3490-01	.3900-01	.9220	.1984-02	.1496-02	.3550	2.300	510.9
277	23.070	.90000	2004.0	.3260-01	.3880-01	.4340-01	.9220	.2207-02	.1656-02	.3870	2.645	514.6

IH72. EXTERNAL TANK CLEAN. HU/HREF (RVZT44)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
278	23.070	.92600	2154.0	.3100-01	.3700-01	.4150-01	.9220	.2109-02	.1574-02	.3620	2.617	518.4
288	29.800	.70000-01	700.00	.2302	.2830	.2938	.9420	.1496-01	.1172-01	2.362	15.94	550.2
288	29.800	.10000+00	701.00	.1697	.2040	.2176	.9345	.1108-01	.8639-02	1.932	12.43	528.1
288	29.800	.15000	702.00	.8300-01	.9850-01	.1083	.9260	.5512-02	.4224-02	1.006	7.316	513.7
288	29.800	.20000	703.00	.4170-01	.4920-01	.5480-01	.9222	.2789-02	.2120-02	.5170	3.516	507.8
288	29.800	.30000	704.00	.2580-01	.3070-01	.3450-01	.9220	.1756-02	.1311-02	.3030	2.177	520.5
288	29.800	.35000	705.00	.2940-01	.3490-01	.3890-01	.9220	.1981-02	.1498-02	.3600	2.510	511.4
278	29.800	.35500	2090.0	.2650-01	.3160-01	.3550-01	.9220	.1802-02	.1346-02	.3100	2.071	517.9
278	29.800	.36500	2092.0	.2790-01	.3320-01	.3720-01	.9220	.1891-02	.1415-02	.3280	2.187	516.4
278	29.800	.37000	2093.0	.2220-01	.2640-01	.2960-01	.9220	.1503-02	.1129-02	.2650	1.772	513.7
290	29.800	.50000	707.00	.2020-01	.2400-01	.2690-01	.9220	.1366-02	.1026-02	.2410	1.679	515.5
290	29.800	.60000	708.00	.1980-01	.2350-01	.2630-01	.9220	.1336-02	.1006-02	.2380	1.546	513.8
290	29.800	.70000	709.00	.1460-01	.1730-01	.1930-01	.9220	.9809-03	.7419-03	.1780	1.158	510.5
290	29.800	.80000	710.00	.2450-01	.2910-01	.3250-01	.9220	.1650-02	.1247-02	.2990	1.896	511.2
278	31.430	.44000	2166.0	.2380-01	.2830-01	.3170-01	.9220	.1609-02	.1209-02	.2840	1.916	513.6
277	31.430	.47600	2005.0	.2220-01	.2640-01	.2950-01	.9220	.1501-02	.1128-02	.2650	1.788	513.6
277	31.430	.51100	2006.0	.1810-01	.2150-01	.2410-01	.9220	.1226-02	.9190-03	.2140	1.492	515.0
277	31.430	.54500	2007.0	.9600-02	.1140-01	.1270-01	.9220	.6432-03	.4875-03	.1180	.8420	507.2
277	31.430	.61600	2009.0	.1830-01	.2180-01	.2430-01	.9220	.1234-02	.9325-03	.2230	1.556	509.2
277	31.430	.65000	2010.0	.1700-01	.2010-01	.2250-01	.9220	.1143-02	.8640-03	.2070	1.466	508.9
277	31.430	.68600	2014.0	.1300-01	.1540-01	.1720-01	.9220	.8748-03	.6603-03	.1570	1.117	510.3
277	31.430	.72050	2015.0	.6400-02	.7600-02	.8400-02	.9220	.4280-03	.3256-03	.7900-01	.6020	504.4
277	31.430	.79040	2017.0	.2290-01	.2720-01	.3030-01	.9220	.1541-02	.1164-02	.2780	1.791	509.5
277	31.430	.86000	2019.0	.6700-02	.8100-02	.9200-02	.9220	.4660-03	.3420-03	.7500-01	.4880	529.0
277	31.430	.89520	2020.0	.3130-01	.3720-01	.4160-01	.9220	.2113-02	.1591-02	.3760	2.487	512.2
278	31.430	.92600	2153.0	.2680-01	.3190-01	.3580-01	.9220	.1817-02	.1360-02	.3160	2.338	516.3
277	33.750	.25000	2079.0	.1710-01	.2060-01	.2320-01	.9220	.1179-02	.8691-03	.1930	1.599	526.5
277	33.750	.30000	2080.0	.2550-01	.3070-01	.3470-01	.9220	.1763-02	.1297-02	.2870	1.907	527 3
277	33.750	.37500	2081.0	.2480-01	.2940-01	.3290-01	.9220	.1670-02	.1259-02	.2990	2.021	511.0
277	33.750	.40000	2082.0	.2470-01	.2930-01	.3280-01	.9220	.1665-02	.1255-02	.2970	2.008	511.6
277	33.750	.43000	2083.0	.2520-01	.2990-01	.3340-01	.9220	.1696-02	.1279-02	.3030	2.052	511.1
277	33.750	.45000	2084.0	.2100-01	.2490-01	.2780-01	.9220	.1413-02	.1065-02	.2520	1.707	511.3
277	33.750	.60000	2085.0	.1610-01	.1910-01	.2130-01	.9220	.1082-02	.8174-03	.1950	1.320	509.8
278	33.750	.65000	2086.0	.1580-01	.1870-01	.2090-01	.9220	.1062-02	.8030-03	.1920	1.313	508.9
278	33.750	.92600	2152.0	.2430-01	.2900-01	.3250-01	.9220	.1652-02	.1236-02	.2870	2.126	516.2
277	36.320	.25000	2066.0	.2400-01	.2850-01	.3190-01	.9220	.1620-02	.1221-02	.2830	1.957	511.3
277	36.320	.35000	2069.0	.2800-01	.3340-01	.3740-01	.9220	.1899-02	.1423-02	.3320	2.237	515.4
277	36.320	.37500	2070.0	.2450-01	.2910-01	.3250-01	.9220	.1654-02	.1247-02	.2960	2.000	511.2
277	36.320	.40000	2071.0	.2360-01	.2800-01	.3130-01	.9220	.1591-02	.1200-02	.2850	1.929	510.7
277	36.320	.42000	2072.0	.2410-01	.2860-01	.3190-01	.9220	.1624-02	.1224-02	.2900	1.962	511.3
277	36.320	.42500	2073.0	.2370-01	.2810-01	.3140-01	.9220	.1596-02	.1203-02	.2850	1.930	511.2
277	36.320	.43500	2075.0	.2300-01	.2730-01	.3050-01	.9220	.1550-02	.1169-02	.2770	1.875	511.2
277	36.320	.45000	2076.0	.2110-01	.2490-01	.2770-01	.9220	.1410-02	.1071-02	.2600	1.761	505.8

IH72, EXTERNAL TANK CLEAN.

(RVZT44)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
277	36.320	.60000	2077.0	.1610-01	.1910-01	.2130-01	.9220	.1082-02	.8186-03	.1960	1.341	508.6
277	36.320	.65000	2078.0	.1360-01	.1610-01	.1790-01	.9220	.9116-03	.6913-03	.1670	1.166	506.9
290	37.700	.50000-01	715.00	.3032	.3839	.3911	.9465	.1989-01	.1542-01	2.755	17.75	572.1
290	37.700	.70000-01	716.00	.2270	.2813	.2945	.9406	.1497-01	.1154-01	2.245	15.25	556.3
290	37.700	.10000+00	717.00	.1540	.1862	.2002	.9334	.1018-01	.7831-02	1.698	11.09	533.9
290	37.700	.15000	718.00	.7610-01	.9090-01	.1006	.9253	.5117-02	.3868-02	.8880	6.585	521.2
290	37.700	.20000	719.00	.3440-01	.4090-01	.4570-01	.9221	.2326-02	.1751-02	.4150	2.843	514.0
288	37.700	.30000	720.00	.2020-01	.2420-01	.2730-01	.9220	.1386-02	.1029-02	.2340	1.693	523.4
288	37.700	.35000	721.00	.2730-01	.3240-01	.3610-01	.9220	.1838-02	.1391-02	.3350	2.368	510.6
288	37.700	.37500	722.00	.2500-01	.2950-01	.3290-01	.9220	.1673-02	.1273-02	.3120	2.210	506.4
288	37.700	.50000	723.00	.2450-01	.2880-01	.3200-01	.9220	.1630-02	.1246-02	.3100	2.191	502.9
288	37.700	.60000	724.00	.2770-01	.3260-01	.3610-01	.9220	.1839-02	.1408-02	.3520	2.305	501.6
288	37.700	.70000	725.00	.1320-01	.1560-01	.1730-01	.9220	.8807-03	.6721-03	.1660	1.081	504.2
288	37.700	.80000	726.00	.2350-01	.2770-01	.3080-01	.9220	.1567-02	.1197-02	.2970	1.908	503.6
288	37.700	.87000	727.00	.3000-01	.3540-01	.3940-01	.9220	.2006-02	.1526-02	.3740	2.439	506.7
288	37.700	.92600	728.00	.2590-01	.3060-01	.3410-01	.9220	.1735-02	.1318-02	.3210	2.382	508.0
289	39.000	.10000-01	993.00	.4457	.5895	.5743	.9541	.2923-01	.2268-01	3.493	24.77	597.3
289	39.000	.25000-01	994.00	.2956	.3758	.3695	.9531	.1880-01	.1505-01	2.650	17.77	575.2
277	45.000	.25000	2036.0	.1040-01	.1250-01	.1410-01	.9220	.7172-03	.5299-03	.1180	.9690	524.9
277	45.000	.32500	2038.0	.2610-01	.3120-01	.3500-01	.9220	.1777-02	.1326-02	.3050	2.115	518.6
277	45.000	.35000	2039.0	.2680-01	.3190-01	.3570-01	.9220	.1813-02	.1361-02	.3190	2.187	514.0
277	45.000	.37500	2040.0	.2600-01	.3090-01	.3450-01	.9220	.1752-02	.1321-02	.3140	2.153	511.0
277	45.000	.40000	2041.0	.2350-01	.2780-01	.3110-01	.9220	.1580-02	.1193-02	.2840	1.951	510.2
277	45.000	.43000	2044.0	.2250-01	.2670-01	.2980-01	.9220	.1514-02	.1145-02	.2740	1.884	508.9
277	45.000	.43500	2045.0	.2250-01	.2670-01	.2970-01	.9220	.1512-02	.1143-02	.2740	1.880	509.1
277	45.000	.44000	2046.0	.2190-01	.2600-01	.2900-01	.9220	.1473-02	.1115-02	.2670	1.837	508.7
277	45.000	.45000	2047.0	.2080-01	.2460-01	.2750-01	.9220	.1397-02	.1056-02	.2530	1.747	509.1
277	45.000	.47000	2048.0	.2030-01	.2410-01	.2690-01	.9220	.1367-02	.1031-02	.2450	1.709	510.7
277	45.000	.55000	2049.0	.1150-01	.1360-01	.1520-01	.9220	.7705-03	.5834-03	.1400	.9820	508.0
277	45.000	.60000	2050.0	.1570-01	.1860-01	.2070-01	.9220	.1055-02	.7983-03	.1920	1.319	508.1
277	45.000	.65000	2051.0	.1870-01	.2210-01	.2460-01	.9220	.1252-02	.9482-03	.2280	1.550	507.8
277	45.000	.75000	2052.0	.1180-01	.1400-01	.1550-01	.9220	.7902-03	.6008-03	.1460	.9500	504.9
277	45.000	.80000	2053.0	.2050-01	.2430-01	.2710-01	.9220	.1377-02	.1044-02	.2520	1.619	506.6
277	45.000	.83000	2054.0	.2530-01	.3000-01	.3340-01	.9220	.1698-02	.1284-02	.3080	1.966	508.8
277	45.000	.84000	2055.0	.2640-01	.3120-01	.3480-01	.9220	.1770-02	.1341-02	.3220	2.061	507.9
277	45.000	.85000	2056.0	.2830-01	.3360-01	.3750-01	.9220	.1903-02	.1441-02	.3460	2.242	508.3
277	45.000	.86000	2057.0	.2930-01	.3470-01	.3870-01	.9220	.1966-02	.1488-02	.3570	2.368	508.4
277	45.000	.87000	2058.0	.3050-01	.3620-01	.4040-01	.9220	.2053-02	.1552-02	.3710	2.520	509.2
277	45.000	.89000	2060.0	.3160-01	.3750-01	.4190-01	.9220	.2129-02	.1604-02	.3800	2.588	511.3
277	45.000	.90000	2061.0	.2070-01	.2450-01	.2730-01	.9220	.1387-02	.1052-02	.2540	1.738	506.7
277	45.000	.91000	2062.0	.1190-01	.1430-01	.1620-01	.9220	.8215-03	.6052-03	.1340	1.108	526.7
277	45.000	.92600	2063.0	.2480-01	.2950-01	.3300-01	.9220	.1677-02	.1261-02	.2960	2.127	513.5
277	45.000	.93500	2064.0	.2960-01	.3530-01	.3970-01	.9220	.2016-02	.1504-02	.3450	2.617	518.6

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT44)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
277	45.000	.94500	2065.0	.4020-01	.4820-01	.5410-01	.9220	.2751-02	.2044-02	.4640	3.122	521.3
288	180.00	.15000-01	2182.0	.4547	.6664	.5940	.9631	.3024-01	.2315-01	2.740	19.73	633.4
288	180.00	.20000-01	2183.0	.4233	.5777	.5309	.9621	.2702-01	.2155-01	3.032	22.30	611.1
288	180.00	.25000-01	2184.0	.3911	.5124	.4767	.9621	.2426-01	.1991-01	3.161	22.53	593.0
288	180.00	.30000-01	2185.0	.3786	.4961	.4619	.9619	.2351-01	.1927-01	3.059	21.66	593.0
288	180.00	.40000-01	737.00	.2080	.2475	.2399	.9583	.1221-01	.1059-01	2.497	16.55	516.0
288	180.00	.45000-01	738.00	.3541	.4472	.4324	.9565	.2201-01	.1802-01	3.254	21.28	571.2
288	180.00	.60000-01	739.00	.3217	.4003	.3975	.9515	.2023-01	.1638-01	3.135	20.93	560.4
288	180.00	.70000-01	740.00	.2876	.3553	.3580	.9483	.1823-01	.1464-01	2.892	19.48	554.3
288	180.00	.80000-01	741.00	.2403	.2940	.3002	.9454	.1528-01	.1223-01	2.514	18.28	546.2
288	180.00	.10000+00	742.00	.2153	.2610	.2725	.9400	.1387-01	.1096-01	2.354	15.80	537.0
288	180.00	.12500	743.00	.1600	.1925	.2057	.9342	.1047-01	.8147-02	1.814	13.31	529.1
288	180.00	.15000	744.00	.1279	.1526	.1656	.9295	.8430-02	.6513-02	1.517	10.70	518.9
288	180.00	.17500	745.00	.8670-01	.1026	.1124	.9260	.5724-02	.4412-02	1.071	8.207	509.0
288	180.00	.20000	746.00	.6320-01	.7440-01	.8210-01	.9235	.4179-02	.3218-02	.8050	5.892	501.7
288	180.00	.21500	747.00	.5390-01	.6420-01	.7170-01	.9226	.3649-02	.2743-02	.6430	4.522	517.4
288	180.00	.23000	748.00	.4300-01	.5130-01	.5760-01	.9221	.2930-02	.2187-02	.5050	3.781	520.9
288	180.00	.24000	749.00	.3360-01	.4020-01	.4530-01	.9220	.2305-02	.1708-02	.3870	2.949	525.3
288	180.00	.25000	750.00	.1760-01	.2110-01	.2370-01	.9220	.1205-02	.8954-03	.2040	1.674	523.4
288	180.00	.35000	752.00	.4210-01	.4990-01	.5560-01	.9220	.2831-02	.2144-02	.5180	3.335	510.2
288	180.00	.40000	753.00	.4200-01	.4950-01	.5500-01	.9220	.2800-02	.2139-02	.5320	3.495	503.2
288	180.00	.50000	754.00	.3700-01	.4360-01	.4840-01	.9220	.2464-02	.1882-02	.4670	3.125	503.6
288	180.00	.60000	755.00	.3730-01	.4400-01	.4890-01	.9220	.2491-02	.1901-02	.4710	3.085	504.1
288	180.00	.70000	756.00	.3300-01	.3890-01	.4320-01	.9220	.2201-02	.1681-02	.4170	2.817	503.5
288	180.00	.80000	757.00	.3100-01	.3660-01	.4060-01	.9220	.2069-02	.1579-02	.3910	2.502	504.3
288	180.00	.90000	758.00	.2140-01	.2520-01	.2810-01	.9220	.1428-02	.1090-02	.2700	1.783	504.3
288	235.00	.22000	759.00	.8460-01	.1025	.1142	.9257	.5814-02	.4305-02	.9260	6.923	536.7
288	235.00	.25000	760.00	.4280-01	.5170-01	.5800-01	.9238	.2954-02	.2181-02	.4780	3.768	532.8
288	235.00	.27000	761.00	.3960-01	.4780-01	.5370-01	.9238	.2735-02	.2015-02	.4380	3.282	534.2
288	235.00	.30000	762.00	.7250-01	.8780-01	.9880-01	.9238	.5028-02	.3690-02	.7950	4.803	536.4
288	235.00	.32000	763.00	.7560-01	.9130-01	.1025	.9238	.5217-02	.3847-02	.8390	4.997	533.7
288	235.00	.34000	764.00	.7370-01	.8870-01	.9930-01	.9238	.5055-02	.3751-02	.8330	4.987	529.6
288	235.00	.36000	765.00	.7280-01	.8760-01	.9800-01	.9238	.4989-02	.3704-02	.8240	5.001	529.3
288	235.00	.38000	766.00	.7170-01	.8610-01	.9630-01	.9238	.4903-02	.3648-02	.8170	5.014	527.9
290	247.00	.23000	768.00	.8160-01	.1004	.1133	.9252	.5763-02	.4150-02	.8330	6.186	550.1
290	247.00	.25000	769.00	.4350-01	.5320-01	.6010-01	.9242	.3054-02	.2211-02	.4560	3.549	544.6
290	247.00	.27000	770.00	.5190-01	.6420-01	.7320-01	.9242	.3722-02	.2639-02	.5160	3.747	555.3
290	247.00	.30000	772.00	.7330-01	.9020-01	.1024	.9242	.5205-02	.3727-02	.7470	4.555	550.5
290	247.00	.31000	773.00	.7560-01	.9290-01	.1052	.9242	.5349-02	.3846-02	.7790	4.717	548.3
290	247.00	.32000	774.00	.7520-01	.9220-01	.1043	.9242	.5303-02	.3824-02	.7800	4.691	546.8
290	247.00	.32500	775.00	.7330-01	.8970-01	.1015	.9242	.5160-02	.3728-02	.7640	4.610	545.8
290	247.00	.33000	776.00	.7590-01	.9290-01	.1051	.9242	.5342-02	.3857-02	.7890	4.774	548.1
290	247.00	.33500	777.00	.7610-01	.9320-01	.1054	.9242	.5361-02	.3872-02	.7930	4.796	548.8

IH72, EXTERNAL TANK CLEAN,

HU/HREF

(RVZT44)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
290	247.00	.34000	778.00	.7430-01	.9080-01	.1026	.9242	.5216-02	.3779-02	.7810	4.725	544.2
290	247.00	.34500	779.00	.7460-01	.9110-01	.1029	.9242	.5235-02	.3792-02	.7830	4.751	544.4
290	247.00	.35000	780.00	.7360-01	.8990-01	.1014	.9242	.5158-02	.3743-02	.7760	4.727	543.4
288	247.00	.36000	782.00	.7510-01	.9080-01	.1017	.9242	.5177-02	.3825-02	.8350	5.123	533.5
288	247.00	.36500	783.00	.7470-01	.9020-01	.1010	.9242	.5141-02	.3804-02	.8330	5.100	532.8
288	247.00	.37000	784.00	.7310-01	.8810-01	.9860-01	.9242	.5018-02	.3720-02	.8190	5.045	531.6
288	247.00	.37500	785.00	.1000-02	.1200-02	.1300-02	.9242	.6785-04	.5027-04	.1100-01	.6900-01	531.9
288	247.00	.38000	786.00	.7330-01	.8840-01	.9890-01	.9242	.5034-02	.3729-02	.8200	5.105	531.9
288	247.00	.39000	787.00	.7360-01	.8880-01	.9930-01	.9242	.5056-02	.3747-02	.8240	5.146	531.8
288	247.00	.40000	788.00	.6830-01	.8250-01	.9250-01	.9242	.4707-02	.3474-02	.7560	4.753	534.3
289	247.00	.50000	789.00	.6980-01	.8540-01	.9640-01	.9242	.4908-02	.3554-02	.7340	4.710	544.9
289	247.00	.60000	790.00	.7470-01	.9070-01	.1020	.9242	.5193-02	.3801-02	.8080	5.321	538.9
289	247.00	.70000	791.00	.6930-01	.8420-01	.9460-01	.9242	.4816-02	.3529-02	.7520	5.331	538.3
289	247.00	.90000	793.00	.4330-01	.5250-01	.5890-01	.9242	.2998-02	.2206-02	.4750	3.083	535.8
278	247.00	.92600	2144.0	.3220-01	.3920-01	.4420-01	.9242	.2246-02	.1635-02	.3410	2.394	539.8
278	247.00	.93000	2149.0	.3730-01	.4570-01	.5170-01	.9242	.2624-02	.1897-02	.3880	2.810	543.6
278	250.57	.92600	2143.0	.3080-01	.3750-01	.4230-01	.9243	.2150-02	.1563-02	.3240	2.273	541.0
278	250.57	.93000	2148.0	.3560-01	.4370-01	.4950-01	.9243	.2513-02	.1809-02	.3660	2.585	546.1
289	258.00	.27000	794.00	.5460-01	.6710-01	.7590-01	.9245	.3865-02	.2777-02	.5600	3.985	549.8
289	258.00	.29000	795.00	.5100-01	.6220-01	.7000-01	.9245	.3564-02	.2595-02	.5420	3.346	542.6
289	258.00	.30000	796.00	.7650-01	.9370-01	.1059	.9245	.5390-02	.3892-02	.7940	4.813	547.3
276	258.00	.32000	798.00	.7910-01	.9740-01	.1103	.9245	.5609-02	.4023-02	.8030	4.840	547.9
276	258.00	.34000	802.00	.7770-01	.9520-01	.1076	.9245	.5473-02	.3951-02	.8020	4.852	544.6
276	258.00	.34500	803.00	.7660-01	.9390-01	.1061	.9245	.5393-02	.3895-02	.7920	4.805	544.3
276	258.00	.35500	805.00	.7780-01	.9540-01	.1079	.9245	.5484-02	.3955-02	.8010	4.858	545.1
276	258.00	.36000	806.00	.7670-01	.9390-01	.1060	.9245	.5390-02	.3902-02	.7980	4.857	543.2
276	258.00	.36500	807.00	.7780-01	.9520-01	.1074	.9245	.5462-02	.3956-02	.8100	4.945	542.9
276	258.00	.37000	808.00	.7430-01	.9080-01	.1024	.9245	.5208-02	.3776-02	.7750	4.748	542.3
276	258.00	.37500	809.00	.7570-01	.9260-01	.1045	.9245	.5312-02	.3851-02	.7900	4.840	542.4
276	258.00	.38000	810.00	.7670-01	.9380-01	.1058	.9245	.5381-02	.3899-02	.7990	4.920	542.7
289	258.00	.40000	812.00	.7530-01	.9160-01	.1029	.9245	.5235-02	.3834-02	.8120	5.024	539.5
278	258.00	.93500	2151.0	.4350-01	.5340-01	.6050-01	.9245	.3075-02	.2208-02	.4430	3.125	547.8
289	270.00	.40000-01	985.00	.3629	.4654	.4085	.9747	.2079-01	.1847-01	3.149	20.14	580.8
289	270.00	.50000-01	986.00	.4222	.5436	.4852	.9710	.2469-01	.2149-01	3.615	22.96	583.1
289	270.00	.60000-01	987.00	.3901	.4970	.4538	.9673	.2310-01	.1985-01	3.468	22.49	576.7
289	270.00	.70000-01	988.00	.3753	.4780	.4443	.9638	.2261-01	.1910-01	3.338	22.11	576.5
289	270.00	.80000-01	989.00	.3341	.4227	.4005	.9604	.2038-01	.1700-01	3.047	21.31	572.1
289	270.00	.10000+00	990.00	.2983	.3697	.3629	.9540	.1847-01	.1518-01	2.950	19.15	557.0
289	270.00	.15000	991.00	.1934	.2358	.2464	.9401	.1254-01	.9841-02	2.056	15.13	542.4
289	270.00	.20000	992.00	.1299	.1556	.1690	.9299	.8600-02	.6613-02	1.508	10.32	523.4
289	270.00	.23000	813.00	.8690-01	.1064	.1194	.9257	.6075-02	.4421-02	.9060	6.592	546.3
289	270.00	.24000	814.00	.6930-01	.8520-01	.9640-01	.9246	.4907-02	.3529-02	.7120	5.748	549.7
289	270.00	.25000	815.00	.4370-01	.5330-01	.6000-01	.9246	.3054-02	.2226-02	.4650	3.678	542.4

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT44)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
289	270.00	.27000	816.00	.4610-01	.5660-01	.6400-01	.9246	.3257-02	.2346-02	.4750	3.375	548.8
289	270.00	.29000	817.00	.5570-01	.6800-01	.7650-01	.9246	.3895-02	.2837-02	.5910	3.682	542.9
289	270.00	.30000	818.00	.7610-01	.9270-01	.1043	.9246	.5309-02	.3871-02	.8090	4.958	542.3
289	270.00	.31000	819.00	.8030-01	.9780-01	.1100	.9246	.5598-02	.4089-02	.8590	5.223	541.2
289	270.00	.32000	820.00	.7990-01	.9700-01	.1088	.9246	.5539-02	.4064-02	.8650	5.251	538.5
289	270.00	.32500	821.00	.8170-01	.9930-01	.1114	.9246	.5671-02	.4156-02	.8820	5.336	539.2
289	270.00	.33000	822.00	.8460-01	.1026	.1150	.9246	.5852-02	.4308-02	.9240	5.617	536.7
289	270.00	.33500	823.00	.8330-01	.1009	.1130	.9246	.5751-02	.4241-02	.9150	5.579	535.6
289	270.00	.34500	825.00	.7720-01	.9340-01	.1046	.9246	.5321-02	.3929-02	.8500	5.172	534.9
289	270.00	.36000	828.00	.7830-01	.9490-01	.1062	.9246	.5407-02	.3986-02	.8590	5.210	535.8
289	270.00	.36500	829.00	.8240-01	.9980-01	.1118	.9246	.5688-02	.4192-02	.9030	5.488	536.0
289	270.00	.37000	830.00	.7400-01	.9020-01	.1014	.9246	.5159-02	.3767-02	.7910	4.805	541.5
289	270.00	.37500	831.00	.7660-01	.9320-01	.1047	.9246	.5329-02	.3896-02	.8200	5.015	540.8
289	270.00	.38000	832.00	.7700-01	.9380-01	.1054	.9246	.5366-02	.3919-02	.8230	5.031	541.3
289	270.00	.39000	833.00	.7530-01	.9170-01	.1031	.9246	.5247-02	.3831-02	.8040	4.969	541.4
289	270.00	.40000	834.00	.7460-01	.9080-01	.1022	.9246	.5200-02	.3795-02	.7950	4.927	541.8
289	270.00	.50000	835.00	.7700-01	.9500-01	.1077	.9246	.5482-02	.3918-02	.7780	4.904	552.7
289	270.00	.60000	836.00	.7860-01	.9620-01	.1085	.9246	.5522-02	.4000-02	.8220	5.476	545.9
289	270.00	.70000	837.00	.6740-01	.8260-01	.9320-01	.9246	.4743-02	.3432-02	.7040	4.954	546.4
289	270.00	.80000	838.00	.7350-01	.8960-01	.1008	.9246	.5129-02	.3738-02	.7810	4.863	542.5
289	270.00	.90000	839.00	.4350-01	.5300-01	.5960-01	.9246	.3031-02	.2211-02	.4630	2.967	541.9
278	270.00	.92600	2141.0	.3310-01	.4070-01	.4610-01	.9246	.2341-02	.1681-02	.3370	2.303	548.1
278	270.00	.93000	2146.0	.4170-01	.5160-01	.5850-01	.9246	.2974-02	.2121-02	.4170	2.938	551.6
278	270.00	.93500	2150.0	.4710-01	.5810-01	.6580-01	.9246	.3343-02	.2393-02	.4750	3.350	549.8
278	289.43	.92600	2140.0	.3210-01	.3940-01	.4460-01	.9243	.2264-02	.1632-02	.3310	2.318	545.4
278	289.43	.93000	2145.0	.3880-01	.4780-01	.5430-01	.9243	.2758-02	.1971-02	.3910	2.786	549.8
289	292.50	.23000	840.00	.7950-01	.9750-01	.1098	.9252	.5589-02	.4045-02	.8220	6.624	548.0
289	292.50	.25000	841.00	.4090-01	.4980-01	.5610-01	.9242	.2854-02	.2079-02	.4360	3.385	541.8
289	292.50	.30000	843.00	.7920-01	.9720-01	.1101	.9242	.5601-02	.4033-02	.8200	4.876	548.0
289	292.50	.35000	845.00	.7790-01	.9490-01	.1070	.9242	.5443-02	.3966-02	.8320	5.112	541.6
289	292.50	.37000	846.00	.7500-01	.9120-01	.1027	.9242	.5225-02	.3815-02	.8050	4.975	540.4
289	292.50	.40000	847.00	.7470-01	.9090-01	.1023	.9242	.5204-02	.3804-02	.8050	5.032	539.8
289	292.50	.45000	848.00	.6770-01	.8260-01	.9300-01	.9242	.4735-02	.3446-02	.7210	4.541	542.2
289	292.50	.50000	849.00	.7080-01	.8710-01	.9890-01	.9242	.5031-02	.3603-02	.7220	4.635	550.9
289	292.50	.60000	851.00	.7160-01	.8750-01	.9880-01	.9242	.5030-02	.3644-02	.7530	5.049	544.8
289	292.50	.65000	852.00	.7450-01	.9100-01	.1027	.9242	.5225-02	.3790-02	.7860	5.353	544.1
289	292.50	.70000	853.00	.6920-01	.8520-01	.9670-01	.9242	.4920-02	.3521-02	.7050	4.934	551.2
289	292.50	.75000	854.00	.4910-01	.6000-01	.6780-01	.9242	.3448-02	.2500-02	.5180	3.361	544.3
289	292.50	.80000	855.00	.6210-01	.7570-01	.8540-01	.9242	.4344-02	.3159-02	.6590	4.296	542.7
278	292.50	.82000	2129.0	.6940-01	.8500-01	.9610-01	.9243	.4884-02	.3523-02	.7170	4.396	544.9
278	292.50	.83000	2130.0	.6890-01	.8440-01	.9550-01	.9243	.4854-02	.3498-02	.7100	4.388	545.4
278	292.50	.85000	2132.0	.6670-01	.8180-01	.9260-01	.9243	.4706-02	.3386-02	.6840	4.251	546.3
278	292.50	.86000	2133.0	.6880-01	.8450-01	.9570-01	.9243	.4860-02	.3496-02	.7060	4.361	546.4

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT44)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
278	292.50	.87000	2134.0	.6610-01	.8110-01	.9200-01	.9243	.4671-02	.3356-02	.6750	4.197	547.0
278	292.50	.88000	2135.0	.7200-01	.8850-01	.1003	.9243	.5096-02	.3658-02	.7340	4.561	547.5
278	292.50	.89000	2136.0	.6610-01	.8130-01	.9210-01	.9243	.4681-02	.3358-02	.6730	4.194	547.8
289	292.50	.90000	856.00	.4070-01	.4950-01	.5570-01	.9242	.2834-02	.2073-02	.4390	2.859	539.5
278	292.50	.92600	2138.0	.3200-01	.3920-01	.4440-01	.9243	.2253-02	.1626-02	.3310	2.321	544.5
278	292.50	.93000	2139.0	.3880-01	.4770-01	.5400-01	.9243	.2744-02	.1970-02	.3960	2.841	547.3
278	301.50	.82000	2116.0	.5870-01	.7180-01	.8130-01	.9239	.4128-02	.2984-02	.6130	3.764	542.8
278	301.50	.83000	2117.0	.6050-01	.7390-01	.8360-01	.9239	.4246-02	.3071-02	.6320	3.859	542.6
278	301.50	.83500	2118.0	.6290-01	.7680-01	.8690-01	.9239	.4414-02	.3194-02	.6580	3.986	542.3
278	301.50	.84000	2119.0	.5940-01	.7260-01	.8220-01	.9239	.4174-02	.3020-02	.6220	3.799	542.4
278	301.50	.85000	2120.0	.6160-01	.7520-01	.8500-01	.9239	.4321-02	.3128-02	.6450	3.953	542.0
278	301.50	.86000	2021.0	.5850-01	.7150-01	.8090-01	.9239	.4109-02	.2970-02	.6100	3.757	542.8
278	301.50	.87000	2122.0	.6290-01	.7700-01	.8720-01	.9239	.4428-02	.3196-02	.6540	4.017	543.5
278	301.50	.88000	2123.0	.6090-01	.7460-01	.8450-01	.9239	.4292-02	.3095-02	.6320	3.898	544.2
278	301.50	.89000	2124.0	.6160-01	.7540-01	.8530-01	.9239	.4335-02	.3129-02	.6400	3.986	543.6
278	301.50	.90000	2125.0	.4270-01	.5200-01	.5880-01	.9239	.2985-02	.2168-02	.4510	2.834	540.3
278	301.50	.92600	2127.0	.3870-01	.4740-01	.5360-01	.9239	.2724-02	.1969-02	.4040	2.537	543.0
278	301.50	.93500	2128.0	.4600-01	.5630-01	.6370-01	.9239	.3236-02	.2337-02	.4790	3.235	543.3
278	305.40	.82000	2113.0	.5740-01	.7010-01	.7940-01	.9238	.4032-02	.2917-02	.6020	3.677	541.9
278	305.40	.83000	2114.0	.5950-01	.7260-01	.8210-01	.9238	.4172-02	.3023-02	.6260	3.829	541.1
278	305.40	.83500	2115.0	.5800-01	.7090-01	.8020-01	.9238	.4075-02	.2949-02	.6090	3.750	541.8
289	305.40	.84000	857.00	.5720-01	.6950-01	.7830-01	.9238	.3984-02	.2913-02	.6210	3.856	538.1
276	305.40	.86000	859.00	.5730-01	.7030-01	.7980-01	.9237	.4056-02	.2911-02	.5880	3.687	545.6
276	305.40	.87000	860.00	.5780-01	.7110-01	.8080-01	.9237	.4110-02	.2941-02	.5900	3.705	547.1
276	305.40	.88000	861.00	.5850-01	.7190-01	.8160-01	.9237	.4149-02	.2977-02	.6000	3.775	545.9
276	305.40	.89000	862.00	.5800-01	.7110-01	.8080-01	.9237	.4106-02	.2947-02	.5950	3.766	545.5
276	305.40	.90000	863.00	.5040-01	.6170-01	.6990-01	.9237	.3556-02	.2563-02	.5240	3.334	543.3
276	305.40	.91000	864.00	.2530-01	.3070-01	.3460-01	.9237	.1761-02	.1284-02	.2710	1.978	536.8
276	305.40	.92600	865.00	.3350-01	.4100-01	.4640-01	.9237	.2361-02	.1701-02	.3470	2.519	543.6
276	309.30	.81000	867.00	.5750-01	.7050-01	.8020-01	.9236	.4075-02	.2924-02	.5910	3.696	545.4
276	309.30	.83000	869.00	.4350-01	.5320-01	.6030-01	.9236	.3065-02	.2214-02	.4560	2.862	541.8
276	315.00	.50000-01	871.00	.4001	.5257	.4779	.9659	.2430-01	.2034-01	3.181	19.89	591.2
276	315.00	.60000-01	872.00	.3657	.4754	.4426	.9624	.2250-01	.1859-01	3.010	19.60	585.7
289	315.00	.70000-01	873.00	.3385	.4286	.4091	.9589	.2082-01	.1722-01	3.077	20.66	572.7
289	315.00	.80000-01	874.00	.2975	.3728	.3624	.9557	.1844-01	.1514-01	2.815	19.69	565.4
289	315.00	.10000+00	875.00	.2708	.3349	.3358	.9495	.1709-01	.1378-01	2.702	17.65	555.3
289	315.00	.15000	876.00	.1734	.2118	.2252	.9366	.1146-01	.6822-02	1.825	13.37	544.4
289	315.00	.20000	877.00	.1039	.1248	.1371	.9275	.6977-02	.5289-02	1.190	8.109	526.3
289	315.00	.35000	878.00	.7240-01	.8770-01	.9880-01	.9233	.5027-02	.3683-02	.7940	4.962	535.8
289	315.00	.40000	879.00	.6700-01	.8110-01	.9130-01	.9233	.4644-02	.3410-02	.7390	4.713	534.6
289	315.00	.50000	880.00	.5530-01	.6750-01	.7650-01	.9233	.3892-02	.2814-02	.5860	4.028	543.3
289	315.00	.55000	881.00	.4160-01	.5060-01	.5710-01	.9233	.2908-02	.2119-02	.4500	3.007	539.1
289	315.00	.60000	882.00	.5820-01	.7070-01	.7980-01	.9233	.4060-02	.2964-02	.6320	4.269	538.0

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT44)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
289	315.00	.65000	883.00	.5760-01	.6990-01	.7890-01	.9233	.4016-02	.2931-02	.6250	4.285	538.1
289	315.00	.70000	884.00	.5600-01	.6810-01	.7700-01	.9233	.3920-02	.2851-02	.6020	4.292	540.2
289	315.00	.75000	885.00	.4210-01	.5100-01	.5750-01	.9233	.2926-02	.2140-02	.4590	2.908	536.8
289	315.00	.80000	886.00	.5230-01	.6320-01	.7110-01	.9233	.3620-02	.2660-02	.5780	3.655	534.1
289	315.00	.84000	887.00	.5220-01	.6310-01	.7100-01	.9233	.3613-02	.2657-02	.5790	3.662	533.5
276	315.00	.85000	888.00	.4910-01	.6000-01	.6810-01	.9233	.3462-02	.2496-02	.5130	3.259	542.1
276	315.00	.87000	890.00	.5040-01	.6160-01	.6990-01	.9233	.3555-02	.2561-02	.5250	3.346	542.5
276	315.00	.88000	891.00	.5190-01	.6350-01	.7210-01	.9233	.3667-02	.2637-02	.5380	3.447	543.5
276	315.00	.89000	892.00	.5070-01	.6200-01	.7040-01	.9233	.3580-02	.2580-02	.5290	3.452	542.4
276	315.00	.90000	893.00	.4690-01	.5730-01	.6500-01	.9233	.3307-02	.2387-02	.4920	3.246	541.5
276	315.00	.91000	894.00	.2390-01	.2890-01	.3260-01	.9233	.1658-02	.1215-02	.2610	1.913	533.2
276	315.00	.92600	895.00	.3190-01	.3910-01	.4430-01	.9233	.2253-02	.1624-02	.3340	2.432	542.2
276	322.30	.42000	897.00	.6000-01	.7310-01	.8290-01	.9230	.4214-02	.3051-02	.6360	4.104	539.1
276	322.30	.43500	898.00	.6450-01	.7860-01	.8910-01	.9230	.4530-02	.3282-02	.6860	4.303	538.6
276	322.30	.45000	899.00	.5660-01	.6900-01	.7830-01	.9230	.3981-02	.2877-02	.5970	3.920	540.0
276	322.30	.50000	900.00	.5260-01	.6450-01	.7360-01	.9230	.3740-02	.2674-02	.5400	3.601	545.5
276	322.30	.60000	901.00	.5300-01	.6470-01	.7350-01	.9230	.3739-02	.2694-02	.5550	3.694	541.6
276	322.30	.70000	902.00	.5280-01	.6460-01	.7350-01	.9230	.3736-02	.2686-02	.5510	3.765	542.6
278	324.45	.41000	2110.0	.6170-01	.7490-01	.8470-01	.9229	.4301-02	.3135-02	.6670	4.227	535.5
278	324.45	.92600	2164.0	.2520-01	.3050-01	.3450-01	.9229	.1752-02	.1280-02	.2740	1.961	534.1
278	326.85	.40500	2108.0	.6070-01	.7350-01	.8300-01	.9228	.4215-02	.3084-02	.6640	4.214	533.0
277	326.85	.44000	2021.0	.5140-01	.6220-01	.7030-01	.9228	.3571-02	.2613-02	.5630	3.601	533.1
277	326.85	.54600	2024.0	.1940-01	.2350-01	.2650-01	.9228	.1345-02	.9874-03	.2140	1.448	531.3
277	326.85	.58100	2025.0	.4720-01	.5750-01	.6520-01	.9228	.3313-02	.2400-02	.5030	3.531	538.9
277	326.85	.61600	2026.0	.4670-01	.5670-01	.6420-01	.9228	.3261-02	.2375-02	.5050	3.531	535.7
277	326.85	.65200	2027.0	.4840-01	.5860-01	.6620-01	.9228	.3367-02	.2460-02	.5270	3.690	534.0
277	326.85	.68600	2028.0	.4790-01	.5820-01	.6590-01	.9228	.3348-02	.2436-02	.5160	3.644	536.4
277	326.85	.72260	2029.0	.3710-01	.4490-01	.5070-01	.9228	.2576-02	.1887-02	.4070	2.861	532.5
277	326.85	.75790	2030.0	.2520-01	.3040-01	.3420-01	.9228	.1738-02	.1280-02	.2800	1.808	529.3
277	326.85	.79310	2031.0	.5070-01	.6140-01	.6940-01	.9228	.3528-02	.2576-02	.5510	3.475	534.4
277	326.85	.82830	2032.0	.5080-01	.6150-01	.6950-01	.9228	.3530-02	.2582-02	.5560	3.536	533.2
277	326.85	.86350	2033.0	.5090-01	.6160-01	.6950-01	.9228	.3534-02	.2589-02	.5600	3.532	532.3
277	326.85	.90000	2034.0	.5310-01	.6420-01	.7250-01	.9228	.3686-02	.2698-02	.5810	3.637	532.9
278	326.85	.92600	2163.0	.2520-01	.3050-01	.3440-01	.9228	.1749-02	.1280-02	.2760	1.975	532.8
277	326.85	.93390	2035.0	.3420-01	.4140-01	.4670-01	.9228	.2373-02	.1739-02	.3760	2.539	532.1
278	330.20	.40000	2104.0	.5970-01	.7240-01	.8180-01	.9227	.4157-02	.3035-02	.6510	4.127	533.9
278	330.20	.40500	2105.0	.5940-01	.7190-01	.8120-01	.9227	.4124-02	.3017-02	.6510	4.130	532.6
278	330.20	.41000	2106.0	.5720-01	.6920-01	.7820-01	.9227	.3975-02	.2906-02	.6250	3.954	533.2
276	330.20	.42000	905.00	.5640-01	.6840-01	.7750-01	.9227	.3939-02	.2866-02	.6080	3.944	535.4
276	330.20	.43500	906.00	.5260-01	.6390-01	.7240-01	.9227	.3682-02	.2674-02	.5650	3.683	536.3
276	330.20	.45000	907.00	.5230-01	.6360-01	.7220-01	.9227	.3669-02	.2657-02	.5570	3.651	537.9
276	330.20	.50000	908.00	.4500-01	.5500-01	.6270-01	.9227	.3187-02	.2288-02	.4690	3.362	542.6
276	330.20	.60000	909.00	.5010-01	.6110-01	.6940-01	.9227	.3531-02	.2548-02	.5300	3.478	539.8

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
276	330.20	.70000	910.00	.4740-01	.5790-01	.6580-01	.9227	.3346-02	.2409-02	.4970	3.362	541.2
276	330.20	.80000	911.00	.3590-01	.4370-01	.4960-01	.9227	.2520-02	.1824-02	.3820	2.459	538.2
278	330.20	.87000	912.00	.5900-02	.7200-02	.8100-02	.9227	.4136-03	.3015-03	.6400-01	.4140	534.2
278	334.98	.92600	2162.0	.2190-01	.2650-01	.2990-01	.9227	.1518-02	.1114-02	.2420	1.729	530.9
276	334.98	.92600	2161.0	.2260-01	.2720-01	.3070-01	.9225	.1561-02	.1147-02	.2510	1.788	529.5
276	334.98	.93500	913.00	.4890-01	.5920-01	.6690-01	.9225	.3400-02	.2487-02	.5370	3.933	531.7
276	334.98	.94500	914.00	.3440-01	.4140-01	.4660-01	.9225	.2371-02	.1747-02	.3850	2.797	527.4
276	337.50	.40000-01	915.00	.3651	.4796	.4404	.9642	.2239-01	.1856-01	2.907	18.02	591.0
276	337.50	.50000-01	916.00	.3825	.4978	.4678	.9606	.2378-01	.1945-01	3.138	19.84	586.2
276	337.50	.70000-01	918.00	.1650	.1984	.1953	.9539	.9931-02	.8389-02	1.863	13.10	525.5
276	337.50	.80000-01	919.00	.2858	.3604	.3590	.9507	.1826-01	.1453-01	2.625	17.74	566.9
276	337.50	.10000+00	920.00	.2318	.2876	.2948	.9449	.1499-01	.1179-01	2.272	15.12	554.8
276	337.50	.15000	921.00	.1446	.1770	.1916	.9331	.9741-02	.7352-02	1.499	10.88	543.6
276	337.50	.20000	922.00	.8240-01	.9960-01	.1110	.9254	.5645-02	.4188-02	.9050	6.076	531.5
276	337.50	.42000	923.00	.4700-01	.5690-01	.6450-01	.9224	.3278-02	.2388-02	.5100	3.349	534.0
278	337.50	.42500	2167.0	.4890-01	.5900-01	.6670-01	.9224	.3389-02	.2483-02	.5390	3.506	531.0
276	337.50	.43500	924.00	.5120-01	.6210-01	.7050-01	.9224	.3582-02	.2602-02	.5510	3.627	535.7
276	337.50	.85000	926.00	.3930-01	.4750-01	.5380-01	.9224	.2735-02	.1996-02	.4280	2.789	533.0
276	337.50	.86000	927.00	.3910-01	.4730-01	.5360-01	.9224	.2724-02	.1987-02	.4260	2.783	533.1
276	337.50	.87000	928.00	.3890-01	.4720-01	.5340-01	.9224	.2714-02	.1980-02	.4250	2.783	533.1
276	337.50	.88000	929.00	.2740-01	.3260-01	.3640-01	.9224	.1849-02	.1395-02	.3290	2.194	511.4
276	337.50	.89000	930.00	.3970-01	.4830-01	.5470-01	.9224	.2783-02	.2020-02	.4270	2.825	536.2
276	337.50	.90000	931.00	.3050-01	.3700-01	.4190-01	.9224	.2130-02	.1551-02	.3310	2.247	534.1
276	337.50	.91000	932.00	.1840-01	.2210-01	.2500-01	.9224	.1269-02	.9346-03	.2060	1.519	527.6
289	337.50	.92600	933.00	.2150-01	.2570-01	.2880-01	.9224	.1465-02	.1096-02	.2530	1.874	520.0
289	343.12	.41500	934.00	.5280-01	.6320-01	.7100-01	.9222	.3615-02	.2686-02	.6110	4.006	524.0
289	343.12	.42000	935.00	.4830-01	.5790-01	.6500-01	.9222	.3309-02	.2457-02	.5580	3.690	524.4
289	343.12	.42500	936.00	.4760-01	.5700-01	.6400-01	.9222	.3254-02	.2423-02	.5550	3.685	522.5
289	343.12	.44500	939.00	.4410-01	.5280-01	.5940-01	.9222	.3021-02	.2244-02	.5100	3.427	524.0
289	343.12	.45000	940.00	.4420-01	.5290-01	.5950-01	.9222	.3026-02	.2248-02	.5110	3.431	524.1
289	343.12	.50000	941.00	.4210-01	.5070-01	.5720-01	.9222	.2911-02	.2141-02	.4730	3.232	530.5
289	343.12	.60000	942.00	.4510-01	.5410-01	.6090-01	.9222	.3097-02	.2293-02	.5160	3.361	526.4
289	343.12	.80000	944.00	.3520-01	.4220-01	.4740-01	.9222	.2413-02	.1793-02	.4080	2.694	523.8
278	345.56	.42500	2168.0	.4700-01	.5660-01	.6390-01	.9222	.3248-02	.2388-02	.5250	3.419	528.3
278	345.56	.92600	2160.0	.2140-01	.2570-01	.2890-01	.9222	.1470-02	.1088-02	.2430	1.738	524.5
289	348.00	.35000	945.00	.4960-01	.5940-01	.6670-01	.9221	.3394-02	.2526-02	.5780	3.708	522.6
289	348.00	.36000	946.00	.4900-01	.5860-01	.6590-01	.9221	.3352-02	.2494-02	.5700	3.668	522.8
289	348.00	.37000	947.00	.4720-01	.5640-01	.6330-01	.9221	.3219-02	.2400-02	.5520	3.564	521.4
276	348.00	.37500	948.00	.4700-01	.5700-01	.6450-01	.9221	.3282-02	.2392-02	.5140	3.298	532.8
276	348.00	.38000	949.00	.4690-01	.5680-01	.6440-01	.9221	.3274-02	.2386-02	.5130	3.320	532.8
276	348.00	.38500	950.00	.4570-01	.5530-01	.6270-01	.9221	.3186-02	.2324-02	.5000	3.248	532.4
276	348.00	.39000	951.00	.4490-01	.5430-01	.6150-01	.9221	.3126-02	.2281-02	.4910	3.208	532.3
276	348.00	.39500	952.00	.4590-01	.5550-01	.6290-01	.9221	.3199-02	.2333-02	.5020	3.231	532.5

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT44)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
276	348.00	.40000	953.00	.4610-01	.5580-01	.6320-01	.9221	.3211-02	.2344-02	.5060	3.314	531.9
276	348.00	.40500	954.00	.3420-01	.4160-01	.4720-01	.9221	.2401-02	.1741-02	.3690	2.418	535.8
276	348.00	.41000	955.00	.4640-01	.5610-01	.6360-01	.9221	.3232-02	.2358-02	.5070	3.333	532.5
276	348.00	.42000	957.00	.4330-01	.5230-01	.5930-01	.9221	.3014-02	.2200-02	.4740	3.135	532.0
276	348.00	.42500	958.00	.4600-01	.5570-01	.6310-01	.9221	.3210-02	.2338-02	.5010	3.312	533.2
276	348.00	.43000	959.00	.4200-01	.5080-01	.5750-01	.9221	.2922-02	.2136-02	.4620	3.050	531.1
276	348.00	.44000	960.00	.4120-01	.4970-01	.5620-01	.9221	.2859-02	.2094-02	.4560	3.015	530.0
276	348.00	.44500	961.00	.4360-01	.5270-01	.5960-01	.9221	.3030-02	.2215-02	.4790	3.171	531.1
276	348.00	.85000	968.00	.3540-01	.4270-01	.4830-01	.9221	.2454-02	.1801-02	.3940	2.578	528.9
276	348.00	.86000	969.00	.3430-01	.4140-01	.4680-01	.9221	.2381-02	.1743-02	.3790	2.486	530.2
277	348.00	.89000	972.00	.3210-01	.3850-01	.4340-01	.9221	.2207-02	.1630-02	.3630	2.440	525.4
277	348.00	.91000	974.00	.1700-01	.2020-01	.2270-01	.9221	.1152-02	.8622-03	.2000	1.479	516.8
278	352.20	.93700	2089.0	.3540-01	.4330-01	.4950-01	.9221	.2514-02	.1798-02	.3680	2.579	543.6
278	354.00	.42500	2169.0	.4290-01	.5160-01	.5810-01	.9220	.2954-02	.2180-02	.4850	3.164	525.6
278	354.00	.43000	2174.0	.4120-01	.4960-01	.5590-01	.9220	.2840-02	.2094-02	.4650	3.030	526.2
278	354.00	.43500	2177.0	.4160-01	.4990-01	.5630-01	.9220	.2859-02	.2112-02	.4720	3.076	524.9
278	354.00	.44000	2179.0	.4000-01	.4800-01	.5410-01	.9220	.2749-02	.2030-02	.4530	2.952	525.2
278	355.16	.92600	2158.0	.2090-01	.2510-01	.2820-01	.9220	.1432-02	.1064-02	.2410	1.755	521.3

EXTERNAL TANK

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
273	.0000	.0000	4.020	71.90	742.0	175.3	.4610	5.213	2608.	.2206-03	.1411-06	4.077
274	-.2000-01	.0000	4.020	71.90	744.0	175.9	.4610	5.218	2612.	.2201-03	.1416-06	4.060
275	-.2000-01	.0000	4.020	71.90	746.0	176.2	.4610	5.216	2615.	.2196-03	.1419-06	4.047
285	-.4000-01	.0000	4.020	72.10	747.0	176.5	.4620	5.228	2617.	.2197-03	.1421-06	4.045
286	-.4000-01	.0000	4.020	71.80	751.0	177.3	.4610	5.210	2623.	.2179-03	.1428-06	4.003
287	-.4000-01	.0000	4.020	71.90	751.0	177.4	.4610	5.220	2623.	.2183-03	.1428-06	4.010

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
273	.5078-01	.1140-01
274	.5083-01	.1142-01
275	.5083-01	.1144-01
285	.5090-01	.1143-01
286	.5085-01	.1149-01
287	.5089-01	.1148-01

TEST DATA

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
286	.00000	.25000-01	2187.0	.5473	.7060	.6559	.9632	.3335-01	.2783-01	4.646	32.21	583.6
285	.00000	.40000-01	600.00	.4270	.5385	.5137	.9592	.2615-01	.2174-01	3.923	24.97	566.6
285	.00000	.50000-01	601.00	.4080	.5087	.4948	.9557	.2519-01	.2077-01	3.917	25.11	558.4
285	.00000	.70000-01	603.00	.3062	.3757	.3773	.9491	.1920-01	.1559-01	3.148	21.50	545.1
285	.00000	.80000-01	604.00	.2861	.3490	.3552	.9460	.1808-01	.1456-01	3.018	19.70	539.8
285	.00000	.15000	606.00	.1225	.1461	.1585	.9298	.8067-02	.6234-02	1.439	10.63	516.2
285	.00000	.20000	607.00	.6520-01	.7740-01	.8600-01	.9236	.4378-02	.3317-02	.7820	5.192	511.4
285	.00000	.21000	608.00	.5950-01	.7140-01	.8010-01	.9229	.4075-02	.3027-02	.6780	4.741	523.1
285	.00000	.22000	609.00	.4840-01	.5810-01	.6520-01	.9224	.3320-02	.2465-02	.5550	4.180	522.0
285	.00000	.30000	610.00	.4250-01	.5140-01	.5820-01	.9220	.2961-02	.2166-02	.4700	3.244	530.1
285	.00000	.35000	611.00	.2000-03	.2000-03	.2000-03	.9220	.1085-04	.7902-05	.2000-02	.1100-01	532.8
285	.00000	.36000	612.00	.4050-01	.4880-01	.5500-01	.9220	.2801-02	.2062-02	.4550	3.091	526.3

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT45)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
285	.00000	.37500	614.00	.4200-01	.5050-01	.5700-01	.9220	.2902-02	.2138-02	.4730	3.211	525.9
287	.00000	.38000	615.00	.4440-01	.5240-01	.5820-01	.9220	.2960-02	.2262-02	.5620	3.862	502.3
287	.00000	.38500	616.00	.4450-01	.5240-01	.5820-01	.9220	.2962-02	.2264-02	.5630	3.868	502.1
287	.00000	.39000	617.00	.4000-03	.5000-03	.6000-03	.9220	.2985-04	.2195-04	.5000-02	.3300-01	529.3
287	.00000	.39500	618.00	.4500-01	.5310-01	.5890-01	.9220	.2999-02	.2293-02	.5700	3.931	502.0
287	.00000	.40000	619.00	.4480-01	.5270-01	.5850-01	.9220	.2980-02	.2278-02	.5660	3.881	502.1
287	.00000	.40500	620.00	.4420-01	.5190-01	.5750-01	.9220	.2924-02	.2248-02	.5690	3.923	497.4
287	.00000	.41000	621.00	.4510-01	.5290-01	.5870-01	.9220	.2986-02	.2294-02	.5790	3.989	498.2
287	.00000	.41500	622.00	.4540-01	.5340-01	.5920-01	.9220	.3015-02	.2312-02	.5800	3.980	499.8
287	.00000	.43000	625.00	.4260-01	.5010-01	.5550-01	.9220	.2827-02	.2170-02	.5470	3.765	498.7
287	.00000	.44000	626.00	.3940-01	.4640-01	.5140-01	.9220	.2617-02	.2007-02	.5050	3.476	499.2
287	.00000	.44500	627.00	.3870-01	.4560-01	.5050-01	.9220	.2572-02	.1971-02	.4940	3.434	499.9
287	.00000	.45000	628.00	.3670-01	.4310-01	.4790-01	.9220	.2436-02	.1867-02	.4670	3.247	500.2
287	.00000	.45500	629.00	.3830-01	.4510-01	.5000-01	.9220	.2546-02	.1949-02	.4870	3.430	501.0
285	.00000	.46000	630.00	.3990-01	.4800-01	.5420-01	.9220	.2757-02	.2030-02	.4480	3.044	526.2
285	.00000	.47000	631.00	.4030-01	.4850-01	.5480-01	.9220	.2788-02	.2051-02	.4520	3.068	526.7
285	.00000	.48000	632.00	.3860-01	.4660-01	.5270-01	.9220	.2684-02	.1964-02	.4270	2.913	529.7
285	.00000	.49000	633.00	.3720-01	.4490-01	.5080-01	.9220	.2584-02	.1895-02	.4140	2.851	528.6
285	.00000	.50000	634.00	.3440-01	.4160-01	.4700-01	.9220	.2393-02	.1753-02	.3820	2.698	529.0
285	.00000	.55000	635.00	.3130-01	.3790-01	.4280-01	.9220	.2180-02	.1596-02	.3470	2.323	529.7
285	.00000	.60000	636.00	.3900-01	.4710-01	.5330-01	.9220	.2713-02	.1985-02	.4310	2.801	530.0
285	.00000	.65000	637.00	.4480-01	.5400-01	.6110-01	.9220	.3109-02	.2280-02	.4980	3.253	528.5
285	.00000	.70000	638.00	.4080-01	.4940-01	.5590-01	.9220	.2847-02	.2077-02	.4480	3.090	531.5
285	.00000	.75000	639.00	.2980-01	.3610-01	.4090-01	.9220	.2080-02	.1516-02	.3260	2.118	532.1
285	.00000	.80000	640.00	.3700-01	.4470-01	.5060-01	.9220	.2574-02	.1882-02	.4080	2.577	530.3
285	.00000	.85000	641.00	.3830-01	.4630-01	.5250-01	.9220	.2672-02	.1949-02	.4200	2.673	531.7
285	.00000	.86000	642.00	.2900-02	.3100-02	.3200-02	.9220	.1626-03	.1456-03	.8100-01	.6370	187.9
285	.00000	.87000	643.00	.3820-01	.4630-01	.5250-01	.9220	.2673-02	.1947-02	.4170	2.711	532.6
285	.00000	.88000	644.00	.3890-01	.4710-01	.5350-01	.9220	.2723-02	.1980-02	.4230	2.771	533.4
287	.00000	.89000	645.00	.3560-01	.4280-01	.4820-01	.9220	.2453-02	.1811-02	.4050	2.694	526.9
287	.00000	.90000	646.00	.2050-01	.2300-01	.2460-01	.9220	.1253-02	.1044-02	.3660	2.659	399.7
287	.00000	.92600	648.00	.1190-01	.1430-01	.1610-01	.9220	.8187-03	.6057-03	.1360	1.005	525.5
287	.00000	.95000	649.00	.4160-01	.4920-01	.5480-01	.9220	.2789-02	.2116-02	.5130	3.818	508.0
275	5.6250	.42500	2170.0	.4440-01	.5300-01	.5950-01	.9220	.3023-02	.2258-02	.5190	3.430	515.9
275	5.6250	.43500	2178.0	.4110-01	.4900-01	.5490-01	.9220	.2792-02	.2089-02	.4830	3.190	514.7
287	11.250	.35000	650.00	.4590-01	.5410-01	.6010-01	.9220	.3061-02	.2333-02	.5750	3.950	504.2
287	11.250	.37000	652.00	.4680-01	.5520-01	.6130-01	.9220	.3120-02	.2381-02	.5880	4.041	503.6
287	11.250	.38000	654.00	.4390-01	.5170-01	.5750-01	.9220	.2927-02	.2234-02	.5530	3.811	503.2
287	11.250	.39500	657.00	.4430-01	.5220-01	.5800-01	.9220	.2949-02	.2253-02	.5590	3.853	502.6
287	11.250	.40500	659.00	.4480-01	.5270-01	.5860-01	.9220	.2981-02	.2278-02	.5650	3.907	502.6
287	11.250	.41000	660.00	.4470-01	.5270-01	.5860-01	.9220	.2981-02	.2277-02	.5650	3.895	502.6
287	11.250	.41500	661.00	.4490-01	.5280-01	.5870-01	.9220	.2986-02	.2285-02	.5690	3.916	501.[illegible]
287	11.250	.42000	662.00	.4230-01	.4980-01	.5540-01	.9220	.2818-02	.2152-02	.5330	3.677	502.[illegible]

IH72, EXTERNAL TANK CLEAN,

(RVZT45)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
287	11.250	.42500	663.00	.4250-01	.5000-01	.5560-01	.9220	.2829-02	.2161-02	.5360	3.706	502.7
287	11.250	.43000	664.00	.4250-01	.5000-01	.5560-01	.9220	.2828-02	.2164-02	.5390	3.768	501.3
287	11.250	.44000	665.00	.4150-01	.4890-01	.5430-01	.9220	.2762-02	.2110-02	.5230	3.630	502.7
287	11.250	.45000	666.00	.4070-01	.4800-01	.5330-01	.9220	.2714-02	.2073-02	.5150	3.570	502.5
287	11.250	.45500	667.00	.4200-01	.4960-01	.5510-01	.9220	.2803-02	.2139-02	.5290	3.665	503.5
287	11.250	.46000	668.00	.3960-01	.4660-01	.5180-01	.9220	.2638-02	.2014-02	.4980	3.466	503.2
287	11.250	.47000	669.00	.4290-01	.5070-01	.5640-01	.9220	.2870-02	.2186-02	.5370	3.743	505.0
287	11.250	.48000	670.00	.4460-01	.5270-01	.5870-01	.9220	.2986-02	.2272-02	.5560	3.871	506.0
287	11.250	.49000	671.00	.4200-01	.4970-01	.5540-01	.9220	.2819-02	.2137-02	.5180	3.592	508.4
287	11.250	.50000	672.00	.3690-01	.4380-01	.4890-01	.9220	.2489-02	.1880-02	.4500	3.183	511.4
287	11.250	.70000	674.00	.4450-01	.5290-01	.5910-01	.9220	.3007-02	.2265-02	.5380	3.724	513.1
287	11.250	.85000	676.00	.3930-01	.4670-01	.5230-01	.9220	.2662-02	.1999-02	.4700	3.037	515.4
287	11.250	.86000	677.00	.4050-01	.4820-01	.5400-01	.9220	.2746-02	.2060-02	.4830	3.133	516.4
287	11.250	.87000	678.00	.3990-01	.4750-01	.5320-01	.9220	.2708-02	.2030-02	.4750	3.113	516.5
287	11.250	.88000	679.00	.3950-01	.4720-01	.5290-01	.9220	.2693-02	.2012-02	.4650	3.079	519.3
287	11.250	.90000	681.00	.2970-01	.3550-01	.3980-01	.9220	.2028-02	.1509-02	.3450	2.358	521.8
287	11.250	.91000	682.00	.1170-01	.1400-01	.1570-01	.9220	.7969-03	.5952-03	.1380	1.018	519.3
287	11.250	.92600	683.00	.2160-01	.2600-01	.2920-01	.9220	.1486-02	.1109-02	.2560	1.898	519.9
287	11.250	.95000	684.00	.4130-01	.4890-01	.5450-01	.9220	.2773-02	.2104-02	.5110	3.767	507.7
287	17.000	.33000	685.00	.4900-01	.5780-01	.6430-01	.9220	.3275-02	.2495-02	.6130	4.210	504.8
287	17.000	.34000	686.00	.4790-01	.5650-01	.6280-01	.9220	.3198-02	.2440-02	.6020	4.137	503.8
287	17.000	.35000	687.00	.4580-01	.5400-01	.6000-01	.9220	.3055-02	.2333-02	.5780	3.971	503.0
275	17.000	.35500	2102.0	.4540-01	.5420-01	.6090-01	.9220	.3094-02	.2307-02	.5270	3.503	517.1
287	17.000	.36000	688.00	.4440-01	.5240-01	.5820-01	.9220	.2962-02	.2262-02	.5600	3.849	503.0
287	17.000	.37000	689.00	.4520-01	.5330-01	.5920-01	.9220	.3015-02	.2300-02	.5680	3.904	503.6
287	17.000	.37500	690.00	.4460-01	.5250-01	.5840-01	.9220	.2970-02	.2267-02	.5610	3.869	503.1
275	17.000	.42500	2171.0	.4520-01	.5390-01	.6040-01	.9220	.3070-02	.2298-02	.5320	3.465	514.3
275	17.000	.43000	2176.0	.4410-01	.5250-01	.5880-01	.9220	.2989-02	.2240-02	.5200	3.440	513.5
285	17.000	.50000	691.00	.3850-01	.4630-01	.5210-01	.9220	.2654-02	.1960-02	.4360	2.967	524.3
285	17.000	.60000	692.00	.4040-01	.4850-01	.5470-01	.9220	.2782-02	.2057-02	.4600	3.002	523.4
285	17.000	.70000	693.00	.3880-01	.4680-01	.5290-01	.9220	.2690-02	.1976-02	.4340	2.970	527.6
285	17.000	.80000	694.00	.3660-01	.4410-01	.4970-01	.9220	.2532-02	.1863-02	.4110	2.609	526.5
285	17.000	.92600	696.00	.2180-01	.2640-01	.3000-01	.9220	.1526-02	.1109-02	.2370	1.745	533.5
275	20.980	.35500	2098.0	.2840-01	.3380-01	.3790-01	.9220	.1928-02	.1443-02	.3340	2.253	514.4
275	20.980	.36000	2099.0	.4300-01	.5140-01	.5760-01	.9220	.2929-02	.2187-02	.5020	3.357	516.1
275	20.980	.36500	2100.0	.4190-01	.4990-01	.5600-01	.9220	.2846-02	.2129-02	.4910	3.287	514.9
275	23.070	.35500	2094.0	.3140-01	.3760-01	.4230-01	.9220	.2149-02	.1595-02	.3600	2.401	520.1
275	23.070	.36000	2095.0	.4310-01	.5140-01	.5770-01	.9220	.2932-02	.2192-02	.5050	3.377	515.3
275	23.070	.36500	2096.0	.4180-01	.4980-01	.5580-01	.9220	.2839-02	.2123-02	.4900	3.277	515.0
274	23.070	.43500	2000.0	.4560-01	.5460-01	.6130-01	.9220	.3118-02	.2317-02	.5240	3.406	518.3
274	23.070	.56890	2001.0	.3920-01	.4720-01	.5330-01	.9220	.2708-02	.1992-02	.4370	3.027	524.8
274	23.070	.70270	2002.0	.3790-01	.4550-01	.5120-01	.9220	.2605-02	.1928-02	.4310	3.115	520.7
274	23.070	.83500	2003.0	.3900-01	.4680-01	.5260-01	.9220	.2674-02	.1982-02	.4440	2.863	520.1

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT45)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
274	23.070	.90000	2004.0	.3730-01	.4490-01	.5080-01	.9220	.2580-02	.1897-02	.4160	2.828	525.0
275	23.070	.92600	2154.0	.2240-01	.2690-01	.3040-01	.9220	.1546-02	.1138-02	.2510	1.808	525.3
285	29.800	.70000-01	700.00	.2752	.3354	.3368	.9491	.1714-01	.1401-01	2.914	19.78	539.0
285	29.800	.10000+00	701.00	.2124	.2546	.2646	.9405	.1347-01	.1081-01	2.436	15.73	521.7
285	29.800	.15000	702.00	.1155	.1377	.1493	.9298	.7600-02	.5880-02	1.363	9.906	515.3
285	29.800	.20000	703.00	.6220-01	.7400-01	.8210-01	.9236	.4181-02	.3168-02	.7460	5.062	511.5
285	29.800	.30000	704.00	.4250-01	.5130-01	.5810-01	.9220	.2957-02	.2165-02	.4720	3.371	529.3
285	29.800	.35000	705.00	.4260-01	.5120-01	.5770-01	.9220	.2936-02	.2167-02	.4820	3.334	524.7
275	29.800	.35500	2090.0	.4380-01	.5230-01	.5870-01	.9220	.2982-02	.2227-02	.5120	3.425	515.7
275	29.800	.36500	2092.0	.4260-01	.5080-01	.5690-01	.9220	.2895-02	.2165-02	.5000	3.333	514.9
275	29.800	.37000	2093.0	.3890-01	.4630-01	.5180-01	.9220	.2632-02	.1975-02	.4610	3.085	512.5
287	29.800	.50000	707.00	.4410-01	.5200-01	.5770-01	.9220	.2939-02	.2246-02	.5580	3.906	502.3
287	29.800	.60000	708.00	.4440-01	.5230-01	.5810-01	.9220	.2959-02	.2261-02	.5620	3.665	502.1
287	29.800	.70000	709.00	.4470-01	.5280-01	.5870-01	.9220	.2989-02	.2277-02	.5600	3.646	504.8
287	29.800	.80000	710.00	.4300-01	.5060-01	.5620-01	.9220	.2862-02	.2186-02	.5420	3.456	502.6
275	31.430	.44000	2166.0	.4350-01	.5180-01	.5800-01	.9220	.2948-02	.2212-02	.5150	3.478	512.9
274	31.430	.47600	2005.0	.4330-01	.5180-01	.5810-01	.9220	.2956-02	.2198-02	.4980	3.358	517.7
274	31.430	.51100	2006.0	.3960-01	.4760-01	.5370-01	.9220	.2730-02	.2011-02	.4440	3.073	523.7
274	31.430	.54600	2007.0	.2370-01	.2840-01	.3190-01	.9220	.1624-02	.1203-02	.2700	1.919	520.1
274	31.430	.61600	2009.0	.4010-01	.4790-01	.5380-01	.9220	.2734-02	.2036-02	.4630	3.221	516.7
274	31.430	.65000	2010.0	.3820-01	.4570-01	.5130-01	.9220	.2606-02	.1944-02	.4440	3.138	515.8
274	31.430	.68600	2014.0	.3990-01	.4780-01	.5380-01	.9220	.2733-02	.2030-02	.4580	3.238	518.8
274	31.430	.72050	2015.0	.2680-01	.3210-01	.3610-01	.9220	.1834-02	.1362-02	.3080	2.314	518.5
274	31.430	.79040	2017.0	.4170-01	.4990-01	.5600-01	.9220	.2847-02	.2120-02	.4820	3.094	516.9
274	31.430	.86000	2019.0	.6900-02	.8300-02	.9400-02	.9220	.4799-03	.3495-03	.7500-01	.4850	530.7
274	31.430	.89520	2020.0	.3890-01	.4670-01	.5260-01	.9220	.2674-02	.1978-02	.4410	2.907	521.3
275	31.430	.92600	2153.0	.2300-01	.2760-01	.3110-01	.9220	.1583-02	.1170-02	.2610	1.930	522.4
274	33.750	.25000	2079.0	.3130-01	.3780-01	.4280-01	.9220	.2177-02	.1590-02	.3420	2.833	529.1
274	33.750	.30000	2080.0	.4620-01	.5600-01	.6350-01	.9220	.3226-02	.2350-02	.5020	3.331	530.6
274	33.750	.37500	2081.0	.4450-01	.5320-01	.5970-01	.9220	.3036-02	.2264-02	.5170	3.489	515.9
274	33.750	.40000	2082.0	.4260-01	.5090-01	.5720-01	.9220	.2906-02	.2165-02	.4930	3.324	516.6
274	33.750	.43000	2083.0	.4520-01	.5400-01	.6060-01	.9220	.3081-02	.2299-02	.5260	3.551	515.5
274	33.750	.45000	2084.0	.4210-01	.5040-01	.5650-01	.9220	.2873-02	.2142-02	.4890	3.296	516.2
274	33.750	.60000	2085.0	.4470-01	.5350-01	.6010-01	.9220	.3057-02	.2272-02	.5140	3.461	518.2
275	33.750	.65000	2086.0	.4000-01	.4760-01	.5330-01	.9220	.2708-02	.2034-02	.4760	3.246	511.8
275	33.750	.92600	2152.0	.2150-01	.2580-01	.2910-01	.9220	.1478-02	.1094-02	.2450	1.808	521.9
274	36.320	.25000	2066.0	.4480-01	.5350-01	.6000-01	.9220	.3052-02	.2277-02	.5200	3.511	515.7
274	36.320	.35000	2069.0	.4580-01	.5480-01	.6160-01	.9220	.3131-02	.2326-02	.5260	3.541	518.4
274	36.320	.37500	2070.0	.4210-01	.5030-01	.5640-01	.9220	.2869-02	.2140-02	.4890	3.300	515.8
274	36.320	.40000	2071.0	.4230-01	.5050-01	.5670-01	.9220	.2880-02	.2151-02	.4930	3.329	515.0
274	36.320	.42000	2072.0	.4540-01	.5430-01	.6090-01	.9220	.3094-02	.2309-02	.5290	3.566	515.4
274	36.320	.42500	2073.0	.4620-01	.5520-01	.6190-01	.9220	.3149-02	.2350-02	.5380	3.628	515.5
274	36.320	.43500	2075.0	.4690-01	.5600-01	.6280-01	.9220	.3193-02	.2382-02	.5450	3.675	515.6

IH72, EXTERNAL TANK CLEAN,

HU/HREF

(RVZT45)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
274	36.320	.45000	2076.0	.4020-01	.4770-01	.5320-01	.9220	.2706-02	.2042-02	.4830	3.273	507.7
274	36.320	.60000	2077.0	.4030-01	.4820-01	.5410-01	.9220	.2748-02	.2049-02	.4680	3.182	516.1
274	36.320	.65000	2078.0	.4260-01	.5090-01	.5710-01	.9220	.2901-02	.2167-02	.4970	3.458	514.9
287	37.700	.50000-01	715.00	.4097	.5034	.4907	.9557	.2497-01	.2085-01	4.205	27.41	548.9
287	37.700	.70000-01	716.00	.3085	.3713	.3727	.9491	.1897-01	.1570-01	3.489	24.04	528.4
287	37.700	.10000+00	717.00	.2191	.2587	.2680	.9405	.1364-01	.1115-01	2.732	18.09	505.6
287	37.700	.15000	718.00	.1161	.1363	.1467	.9298	.7464-02	.5910-02	1.497	11.24	497.4
287	37.700	.20000	719.00	.6170-01	.7200-01	.7900-01	.9236	.4020-02	.3139-02	.8220	5.706	488.9
287	37.700	.30000	720.00	.5260-01	.6250-01	.6980-01	.9220	.3553-02	.2678-02	.6360	4.632	512.9
285	37.700	.35000	721.00	.4330-01	.5210-01	.5870-01	.9220	.2986-02	.2206-02	.4920	3.447	524.1
285	37.700	.37500	722.00	.4370-01	.5240-01	.5890-01	.9220	.3000-02	.2223-02	.5000	3.512	522.0
285	37.700	.50000	723.00	.4280-01	.5120-01	.5750-01	.9220	.2926-02	.2177-02	.4950	3.470	519.5
285	37.700	.60000	724.00	.3970-01	.4750-01	.5330-01	.9220	.2715-02	.2019-02	.4590	2.973	519.8
285	37.700	.70000	725.00	.4160-01	.5000-01	.5640-01	.9220	.2870-02	.2118-02	.4710	3.029	524.6
285	37.700	.80000	726.00	.4070-01	.4880-01	.5490-01	.9220	.2794-02	.2069-02	.4650	2.959	522.3
285	37.700	.87000	727.00	.3940-01	.4730-01	.5340-01	.9220	.2718-02	.2003-02	.4440	2.869	525.4
285	37.700	.92600	728.00	.2240-01	.2710-01	.3060-01	.9220	.1558-02	.1141-02	.2480	1.818	529.7
286	39.000	.10000-01	993.00	.4162	.5259	.4893	.9642	.2488-01	.2116-01	3.805	27.33	570.7
286	39.000	.25000-01	994.00	.4785	.6064	.5666	.9632	.2881-01	.2433-01	4.327	29.06	572.7
286	39.000	.30000-01	995.00	.8780-01	.6046	.2393	.9630	.1217-01	.4462-02	.1960	1.260	706.6
274	45.000	.25000	2036.0	.2810-01	.3410-01	.3870-01	.9220	.1966-02	.1426-02	.3010	2.455	533.0
274	45.000	.32500	2038.0	.4760-01	.5710-01	.6440-01	.9220	.3272-02	.2417-02	.5380	3.726	522.0
274	45.000	.35000	2039.0	.4880-01	.5840-01	.6560-01	.9220	.3334-02	.2480-02	.5620	3.846	517.7
274	45.000	.37500	2040.0	.4740-01	.5660-01	.6350-01	.9220	.3228-02	.2407-02	.5500	3.765	515.9
274	45.000	.40000	2041.0	.4700-01	.5620-01	.6300-01	.9220	.3201-02	.2391-02	.5490	3.760	514.8
274	45.000	.43000	2044.0	.4340-01	.5170-01	.5790-01	.9220	.2943-02	.2205-02	.5100	3.501	512.8
274	45.000	.43500	2045.0	.4460-01	.5310-01	.5950-01	.9220	.3026-02	.2266-02	.5240	3.591	513.2
274	45.000	.44000	2046.0	.4340-01	.5170-01	.5790-01	.9220	.2944-02	.2206-02	.5110	3.507	512.6
274	45.000	.45000	2047.0	.4330-01	.5160-01	.5790-01	.9220	.2941-02	.2203-02	.5100	3.517	513.0
274	45.000	.47000	2048.0	.4440-01	.5300-01	.5940-01	.9220	.3022-02	.2257-02	.5170	3.600	515.0
274	45.000	.55000	2049.0	.3280-01	.3930-01	.4420-01	.9220	.2247-02	.1665-02	.3740	2.601	520.0
274	45.000	.60000	2050.0	.4320-01	.5160-01	.5790-01	.9220	.2945-02	.2197-02	.5030	3.443	515.5
274	45.000	.65000	2051.0	.4330-01	.5160-01	.5780-01	.9220	.2938-02	.2198-02	.5070	3.436	513.6
274	45.000	.75000	2052.0	.3620-01	.4330-01	.4870-01	.9220	.2474-02	.1839-02	.4160	2.680	518.3
274	45.000	.80000	2053.0	.4260-01	.5080-01	.5680-01	.9220	.2890-02	.2166-02	.5020	3.210	512.5
274	45.000	.83000	2054.0	.4480-01	.5350-01	.6010-01	.9220	.3054-02	.2278-02	.5210	3.316	515.7
274	45.000	.84000	2055.0	.4270-01	.5100-01	.5720-01	.9220	.2908-02	.2173-02	.4990	3.177	514.8
274	45.000	.85000	2056.0	.4290-01	.5120-01	.5740-01	.9220	.2919-02	.2180-02	.5000	3.228	515.1
274	45.000	.86000	2057.0	.4100-01	.4890-01	.5490-01	.9220	.2789-02	.2083-02	.4780	3.158	515.0
274	45.000	.87000	2058.0	.4030-01	.4820-01	.5410-01	.9220	.2751-02	.2051-02	.4670	3.162	516.4
274	45.000	.89000	2060.0	.3660-01	.4390-01	.4940-01	.9220	.2511-02	.1859-02	.4150	2.812	520.9
274	45.000	.90000	2061.0	.2460-01	.2950-01	.3320-01	.9220	.1686-02	.1249-02	.2800	1.901	520.2
274	45.000	.91000	2062.0	.2680-01	.3250-01	.3690-01	.9220	.1877-02	.1363-02	.2890	2.381	532.3

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT45)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
274	45.000	.92600	2063.0	.2500-01	.3010-01	.3400-01	.9220	.1727-02	.1270-02	.2790	1.992	524.7
274	45.000	.93500	2064.0	.2980-01	.3600-01	.4070-01	.9220	.2067-02	.1515-02	.3300	2.488	526.6
274	45.000	.94500	2065.0	.3280-01	.3960-01	.4480-01	.9220	.2277-02	.1669-02	.3630	2.434	526.9
285	180.00	.15000-01	2182.0	.6288	.9457	.8283	.9641	.4216-01	.3201-01	3.568	25.67	635.6
285	180.00	.20000-01	2183.0	.5556	.7381	.6799	.9630	.3461-01	.2828-01	4.273	31.66	596.0
285	180.00	.25000-01	2184.0	.4931	.6341	.5902	.9630	.3004-01	.2510-01	4.217	30.27	579.0
285	180.00	.30000-01	2185.0	.4807	.6209	.5775	.9629	.2940-01	.2447-01	4.047	28.82	581.6
285	180.00	.40000-01	737.00	.1858	.2199	.2128	.9591	.1083-01	.9460-02	2.279	15.18	506.1
285	180.00	.45000-01	738.00	.4278	.5322	.5139	.9573	.2616-01	.2178-01	4.147	27.32	556.6
285	180.00	.60000-01	739.00	.3477	.4271	.4229	.9522	.2153-01	.1770-01	3.558	23.92	546.0
285	180.00	.70000-01	740.00	.3012	.3687	.3705	.9489	.1886-01	.1533-01	3.125	21.17	543.2
285	180.00	.80000-01	741.00	.2505	.3049	.3104	.9459	.1580-01	.1275-01	2.668	19.49	537.8
285	180.00	.10000+00	742.00	.2056	.2490	.2595	.9404	.1321-01	.1047-01	2.244	15.10	532.6
285	180.00	.12500	743.00	.1569	.1892	.2020	.9345	.1028-01	.7989-02	1.752	12.86	527.8
285	180.00	.15000	744.00	.1250	.1498	.1629	.9297	.8290-02	.6364-02	1.439	10.14	520.9
285	180.00	.17500	745.00	.8470-01	.1009	.1110	.9261	.5649-02	.4313-02	1.007	7.700	513.5
285	180.00	.20000	746.00	.6900-01	.8180-01	.9060-01	.9236	.4613-02	.3515-02	.8430	6.153	507.2
285	180.00	.21500	747.00	.5620-01	.6720-01	.7540-01	.9226	.3837-02	.2859-02	.6480	4.554	520.3
285	180.00	.23000	748.00	.4630-01	.5550-01	.6250-01	.9221	.3180-02	.2356-02	.5290	3.956	522.6
285	180.00	.24000	749.00	.3350-01	.4030-01	.4550-01	.9220	.2318-02	.1706-02	.3760	2.868	526.4
285	180.00	.25000	750.00	.1710-01	.2050-01	.2320-01	.9220	.1179-02	.8695-03	.1930	1.580	524.9
285	180.00	.35000	752.00	.4320-01	.5180-01	.5840-01	.9220	.2973-02	.2198-02	.4910	3.140	523.6
285	180.00	.40000	753.00	.4390-01	.5240-01	.5880-01	.9220	.2994-02	.2234-02	.5130	3.347	517.5
285	180.00	.50000	754.00	.4200-01	.5030-01	.5650-01	.9220	.2874-02	.2138-02	.4870	3.229	519.4
285	180.00	.60000	755.00	.4010-01	.4840-01	.5480-01	.9220	.2788-02	.2042-02	.4450	2.879	529.1
285	180.00	.70000	756.00	.3910-01	.4780-01	.5450-01	.9220	.2773-02	.1992-02	.4120	2.729	540.2
285	180.00	.80000	757.00	.3400-01	.4140-01	.4720-01	.9220	.2403-02	.1728-02	.3590	2.258	539.4
285	180.00	.90000	758.00	.9400-02	.1150-01	.1310-01	.9220	.6676-03	.4788-03	.9900-01	.6400	540.9
285	235.00	.22000	759.00	.4810-01	.5760-01	.6460-01	.9224	.3290-02	.2446-02	.5530	4.168	521.0
285	235.00	.25000	760.00	.2160-01	.2590-01	.2920-01	.9220	.1488-02	.1100-02	.2460	1.950	523.4
285	235.00	.27000	761.00	.1900-01	.2280-01	.2570-01	.9220	.1309-02	.9647-03	.2140	1.608	525.5
285	235.00	.30000	762.00	.4280-01	.5150-01	.5820-01	.9220	.2965-02	.2176-02	.4770	2.895	527.9
285	235.00	.32000	763.00	.4380-01	.5280-01	.5960-01	.9220	.3035-02	.2232-02	.4910	2.938	526.8
285	235.00	.34000	764.00	.4610-01	.5540-01	.6250-01	.9220	.3182-02	.2346-02	.5200	3.118	525.4
285	235.00	.36000	765.00	.4230-01	.5080-01	.5730-01	.9220	.2917-02	.2155-02	.4800	2.922	524.1
285	235.00	.38000	766.00	.4330-01	.5190-01	.5850-01	.9220	.2977-02	.2203-02	.4940	3.041	522.7
287	247.00	.23000	768.00	.4500-01	.5380-01	.6040-01	.9221	.3073-02	.2290-02	.5260	3.966	520.9
287	247.00	.25000	769.00	.1500-01	.1800-01	.2030-01	.9220	.1032-02	.7646-03	.1730	1.360	524.6
287	247.00	.27000	770.00	.1360-01	.1650-01	.1880-01	.9220	.9561-03	.6944-03	.1480	1.089	536.8
287	247.00	.30000	772.00	.4250-01	.5130-01	.5800-01	.9220	.2953-02	.2164-02	.4740	2.917	531.7
287	247.00	.31000	773.00	.4240-01	.5110-01	.5770-01	.9220	.2937-02	.2159-02	.4770	2.919	529.5
287	247.00	.32000	774.00	.4280-01	.5140-01	.5800-01	.9220	.2953-02	.2177-02	.4850	2.943	527.9
287	247.00	.32500	775.00	.4420-01	.5310-01	.5980-01	.9220	.3045-02	.2247-02	.5020	3.057	527.2

IH72, EXTERNAL TANK CLEAN,

HU/HREF

(RVZT45)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
287	247.00	.33000	776.00	.4270-01	.5140-01	.5790-01	.9220	.2949-02	.2175-02	.4850	2.961	527.6
287	247.00	.33500	777.00	.4380-01	.5260-01	.5930-01	.9220	.3020-02	.2228-02	.4970	3.037	527.4
287	247.00	.34000	778.00	.4220-01	.5070-01	.5710-01	.9220	.2908-02	.2149-02	.4820	2.944	526.3
287	247.00	.34500	779.00	.4320-01	.5180-01	.5840-01	.9220	.2972-02	.2196-02	.4930	3.018	526.2
287	247.00	.35000	780.00	.4270-01	.5130-01	.5770-01	.9220	.2938-02	.2175-02	.4910	3.015	525.1
285	247.00	.36000	782.00	.4260-01	.5130-01	.5790-01	.9220	.2946-02	.2170-02	.4800	2.956	525.9
285	247.00	.36500	783.00	.4250-01	.5120-01	.5770-01	.9220	.2938-02	.2165-02	.4800	2.949	525.4
285	247.00	.37000	784.00	.3820-01	.4590-01	.5170-01	.9220	.2633-02	.1945-02	.4340	2.680	524.1
285	247.00	.37500	785.00	.1700-02	.2100-02	.2400-02	.9220	.1216-03	.8865-04	.1900-01	.1180	532.0
285	247.00	.38000	786.00	.4670-01	.5610-01	.6330-01	.9220	.3220-02	.2377-02	.5290	3.309	524.4
285	247.00	.39000	787.00	.4680-01	.5620-01	.6330-01	.9220	.3221-02	.2382-02	.5330	3.342	523.3
285	247.00	.40000	788.00	.4250-01	.5110-01	.5750-01	.9220	.2929-02	.2166-02	.4840	3.062	523.5
286	247.00	.50000	789.00	.4260-01	.5090-01	.5700-01	.9220	.2898-02	.2168-02	.5040	3.280	518.0
286	247.00	.60000	790.00	.4570-01	.5430-01	.6060-01	.9220	.3082-02	.2324-02	.5530	3.693	512.5
286	247.00	.70000	791.00	.4290-01	.5100-01	.5710-01	.9220	.2903-02	.2182-02	.5140	3.692	514.9
286	247.00	.90000	793.00	.1750-01	.2100-01	.2360-01	.9220	.1202-02	.8914-03	.2020	1.316	524.1
275	247.00	.92600	2144.0	.1770-01	.2120-01	.2400-01	.9220	.1219-02	.8974-03	.1980	1.399	525.3
275	247.00	.93000	2149.0	.2100-01	.2540-01	.2870-01	.9220	.1457-02	.1069-02	.2330	1.701	527.5
275	250.57	.92600	2143.0	.1870-01	.2250-01	.2540-01	.9220	.1290-02	.9493-03	.2090	1.478	525.6
275	250.57	.93000	2148.0	.2500-01	.3010-01	.3410-01	.9220	.1733-02	.1269-02	.2760	1.969	528.1
286	258.00	.27000	794.00	.2460-01	.2940-01	.3310-01	.9220	.1683-02	.1249-02	.2830	2.043	523.7
286	258.00	.29000	795.00	.3240-01	.3870-01	.4350-01	.9220	.2213-02	.1647-02	.3770	2.354	521.6
286	258.00	.30000	796.00	.4640-01	.5550-01	.6240-01	.9220	.3171-02	.2361-02	.5410	3.321	521.4
273	258.00	.32000	798.00	.4530-01	.5490-01	.6240-01	.9220	.3169-02	.2298-02	.4840	2.940	531.2
273	258.00	.34000	802.00	.4340-01	.5260-01	.5960-01	.9220	.3028-02	.2204-02	.4690	2.860	529.0
273	258.00	.34500	803.00	.4260-01	.5160-01	.5850-01	.9220	.2969-02	.2164-02	.4610	2.822	528.5
273	258.00	.35500	805.00	.4140-01	.5020-01	.5690-01	.9220	.2891-02	.2101-02	.4450	2.721	529.9
273	258.00	.36000	806.00	.4130-01	.5000-01	.5670-01	.9220	.2877-02	.2099-02	.4490	2.756	527.8
273	258.00	.36500	807.00	.4040-01	.4890-01	.5540-01	.9220	.2814-02	.2053-02	.4390	2.704	527.8
273	258.00	.37000	808.00	.3950-01	.4770-01	.5410-01	.9220	.2745-02	.2005-02	.4300	2.654	527.2
273	258.00	.37500	809.00	.4080-01	.4940-01	.5590-01	.9220	.2839-02	.2074-02	.4450	2.747	527.1
273	258.00	.38000	810.00	.4090-01	.4950-01	.5610-01	.9220	.2847-02	.2079-02	.4460	2.767	527.3
286	258.00	.40000	812.00	.4480-01	.5320-01	.5940-01	.9220	.3022-02	.2278-02	.5420	3.396	512.8
275	258.00	.93500	2151.0	.2980-01	.3600-01	.4070-01	.9220	.2068-02	.1515-02	.3290	2.348	528.3
286	270.00	.40000-01	985.00	.4039	.4983	.4778	.9592	.2430-01	.2053-01	4.066	26.37	552.6
286	270.00	.50000-01	986.00	.4219	.5179	.5050	.9656	.2568-01	.2145-01	4.341	28.06	548.2
286	270.00	.60000-01	987.00	.3551	.4306	.4266	.9522	.2169-01	.1805-01	3.860	25.54	536.7
286	270.00	.70000-01	988.00	.3130	.3793	.3809	.9490	.1936-01	.1591-01	3.419	23.11	535.7
286	270.00	.80000-01	989.00	.2630	.3172	.3226	.9460	.1640-01	.1337-01	2.937	20.97	531.0
286	270.00	.10000+00	990.00	.2195	.2620	.2721	.9404	.1383-01	.1116-01	2.581	17.08	519.2
286	270.00	.15000	991.00	.1804	.1426	.1540	.9297	.7832-02	.6123-02	1.480	11.08	508.9
286	270.00	.20000	992.00	.6470-01	.7590-01	.8370-01	.9236	.4254-02	.3287-02	.8290	5.750	498.8
286	270.00	.23000	813.00	.4570-01	.5440-01	.6080-01	.9221	.3092-02	.2324-02	.5470	4.043	515.1

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT45)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
286	270.00	.24000	814.00	.3460-01	.4130-01	.4640-01	.9220	.2358-02	.1760-02	.4060	3.328	519.9
286	270.00	.25000	815.00	.2110-01	.2520-01	.2820-01	.9220	.1436-02	.1070-02	.2460	1.969	520.5
286	270.00	.27000	816.00	.2270-01	.2720-01	.3050-01	.9220	.1553-02	.1152-02	.2610	1.880	523.7
286	270.00	.29000	817.00	.3410-01	.4070-01	.4570-01	.9220	.2322-02	.1732-02	.3990	2.511	520.4
286	270.00	.30000	818.00	.4320-01	.5150-01	.5770-01	.9220	.2934-02	.2196-02	.5110	3.171	517.8
286	270.00	.31000	819.00	.4590-01	.5460-01	.6120-01	.9220	.3110-02	.2334-02	.5480	3.372	515.9
286	270.00	.32000	820.00	.4370-01	.5200-01	.5810-01	.9220	.2955-02	.2224-02	.5260	3.236	513.9
286	270.00	.32500	821.00	.4610-01	.5480-01	.6130-01	.9220	.3115-02	.2343-02	.5530	3.389	514.5
286	270.00	.33000	822.00	.4500-01	.5340-01	.5970-01	.9220	.3033-02	.2288-02	.5450	3.355	512.2
286	270.00	.33500	823.00	.4490-01	.5330-01	.5950-01	.9220	.3025-02	.2284-02	.5450	3.365	511.8
286	270.00	.34500	825.00	.4210-01	.5000-01	.5580-01	.9220	.2836-02	.2142-02	.5130	3.157	511.2
286	270.00	.36000	828.00	.4320-01	.5130-01	.5730-01	.9220	.2915-02	.2199-02	.5240	3.215	512.3
286	270.00	.36500	829.00	.4300-01	.5100-01	.5700-01	.9220	.2897-02	.2185-02	.5200	3.200	512.5
286	270.00	.37000	830.00	.4470-01	.5330-01	.5960-01	.9220	.3031-02	.2275-02	.5340	3.290	515.8
286	270.00	.37500	831.00	.4450-01	.5290-01	.5910-01	.9220	.3007-02	.2260-02	.5330	3.300	514.9
286	270.00	.38000	832.00	.4330-01	.5150-01	.5760-01	.9220	.2927-02	.2200-02	.5190	3.213	514.8
286	270.00	.39000	833.00	.4470-01	.5310-01	.5940-01	.9220	.3018-02	.2270-02	.5360	3.361	514.2
286	270.00	.40000	834.00	.4400-01	.5230-01	.5850-01	.9220	.2975-02	.2239-02	.5300	3.331	513.9
286	270.00	.50000	835.00	.4380-01	.5250-01	.5900-01	.9220	.3001-02	.2228-02	.5060	3.238	523.3
286	270.00	.60000	836.00	.4720-01	.5610-01	.6280-01	.9220	.3193-02	.2398-02	.5630	3.812	515.6
286	270.00	.70000	837.00	.4310-01	.5140-01	.5750-01	.9220	.2926-02	.2192-02	.5110	3.653	517.3
286	270.00	.80000	838.00	.4360-01	.5190-01	.5810-01	.9220	.2953-02	.2217-02	.5210	3.289	515.6
286	270.00	.90000	839.00	.2430-01	.2910-01	.3270-01	.9220	.1661-02	.1235-02	.2820	1.828	521.9
275	270.00	.92600	2141.0	.2470-01	.2980-01	.3370-01	.9220	.1711-02	.1257-02	.2750	1.905	526.6
275	270.00	.93000	2146.0	.2930-01	.3530-01	.3990-01	.9220	.2030-02	.1488-02	.3240	2.309	528.0
275	270.00	.93500	2150.0	.3220-01	.3890-01	.4400-01	.9220	.2235-02	.1638-02	.3570	2.543	527.9
275	289.43	.92600	2140.0	.2460-01	.2960-01	.3330-01	.9220	.1695-02	.1251-02	.2780	1.965	523.7
275	289.43	.93000	2145.0	.2900-01	.3500-01	.3950-01	.9220	.2007-02	.1476-02	.3250	2.340	525.8
286	292.50	.23000	840.00	.3620-01	.4320-01	.4850-01	.9221	.2466-02	.1839-02	.4230	3.457	520.5
286	292.50	.25000	841.00	.2090-01	.2500-01	.2810-01	.9220	.1431-02	.1063-02	.2420	1.896	523.1
286	292.50	.30000	843.00	.4990-01	.5970-01	.6710-01	.9220	.3412-02	.2537-02	.5790	3.485	522.4
286	292.50	.35000	845.00	.5130-01	.6100-01	.6830-01	.9220	.3473-02	.2607-02	.6120	3.810	515.8
286	292.50	.37000	846.00	.4460-01	.5310-01	.5940-01	.9220	.3019-02	.2269-02	.5350	3.349	514.9
286	292.50	.40000	847.00	.4310-01	.5130-01	.5730-01	.9220	.2913-02	.2194-02	.5200	3.297	513.4
286	292.50	.45000	848.00	.4470-01	.5320-01	.5950-01	.9220	.3027-02	.2275-02	.5360	3.421	515.1
286	292.50	.50000	849.00	.4840-01	.5800-01	.6520-01	.9220	.3314-02	.2460-02	.5590	3.637	523.3
286	292.50	.60000	851.00	.4570-01	.5450-01	.6110-01	.9220	.3104-02	.2326-02	.5430	3.692	517.2
286	292.50	.65000	852.00	.4580-01	.5440-01	.6090-01	.9220	.3097-02	.2327-02	.5480	3.792	514.9
286	292.50	.70000	853.00	.4350-01	.5210-01	.5860-01	.9220	.2980-02	.2214-02	.5040	3.582	522.8
286	292.50	.75000	854.00	.3660-01	.4380-01	.4920-01	.9220	.2504-02	.1859-02	.4230	2.775	523.2
286	292.50	.80000	855.00	.3940-01	.4690-01	.5260-01	.9220	.2676-02	.2001-02	.4640	3.063	518.6
275	292.50	.82000	2129.0	.4200-01	.5040-01	.5670-01	.9220	.2883-02	.2133-02	.4770	2.961	522.0
275	292.50	.83000	2130.0	.3950-01	.4740-01	.5350-01	.9220	.2718-02	.2008-02	.4480	2.800	522.9

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, EXTERNAL TANK CLEAN, HU/HREF

(RVZT45)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
275	292.50	.85000	2132.0	.4150-01	.4980-01	.5610-01	.9220	.2851-02	.2110-02	.4720	2.970	522.0
275	292.50	.86000	2133.0	.4220-01	.5060-01	.5700-01	.9220	.2897-02	.2145-02	.4810	3.011	521.5
275	292.50	.87000	2134.0	.4220-01	.5060-01	.5700-01	.9220	.2896-02	.2145-02	.4810	3.029	521.3
275	292.50	.88000	2135.0	.4200-01	.5040-01	.5670-01	.9220	.2884-02	.2135-02	.4780	3.009	521.8
275	292.50	.89000	2136.0	.4160-01	.5000-01	.5630-01	.9220	.2860-02	.2115-02	.4720	2.979	522.5
286	292.50	.90000	856.00	.2750-01	.3280-01	.3680-01	.9220	.1871-02	.1397-02	.3230	2.126	519.2
275	292.50	.92600	2138.0	.2590-01	.3110-01	.3500-01	.9220	.1779-02	.1315-02	.2930	2.076	522.7
275	292.50	.93000	2139.0	.2890-01	.3480-01	.3920-01	.9220	.1993-02	.1470-02	.3260	2.363	524.2
275	301.50	.82000	2116.0	.3930-01	.4720-01	.5320-01	.9220	.2704-02	.2000-02	.4470	2.772	522.3
275	301.50	.83000	2117.0	.3890-01	.4670-01	.5260-01	.9220	.2674-02	.1979-02	.4430	2.733	521.9
275	301.50	.83500	2118.0	.3960-01	.4760-01	.5360-01	.9220	.2722-02	.2015-02	.4510	2.762	521.8
275	301.50	.84000	2119.0	.3870-01	.4640-01	.5220-01	.9220	.2656-02	.1966-02	.4400	2.717	521.8
275	301.50	.85000	2120.0	.4060-01	.4870-01	.5470-01	.9220	.2782-02	.2064-02	.4650	2.879	520.5
275	301.50	.86000	2021.0	.4460-01	.5340-01	.6000-01	.9220	.3052-02	.2266-02	.5120	3.187	519.9
275	301.50	.87000	2122.0	.4140-01	.4960-01	.5580-01	.9220	.2837-02	.2105-02	.4750	2.949	520.2
275	301.50	.88000	2123.0	.4030-01	.4830-01	.5430-01	.9220	.2760-02	.2047-02	.4610	2.881	520.4
275	301.50	.89000	2124.0	.4010-01	.4800-01	.5400-01	.9220	.2747-02	.2036-02	.4580	2.882	520.9
275	301.50	.90000	2125.0	.2780-01	.3340-01	.3750-01	.9220	.1908-02	.1415-02	.3190	2.023	520.6
275	301.50	.92600	2127.0	.3260-01	.3910-01	.4400-01	.9220	.2238-02	.1655-02	.3690	2.344	522.4
275	301.50	.93500	2128.0	.3610-01	.4330-01	.4890-01	.9220	.2483-02	.1834-02	.4080	2.787	523.1
275	305.40	.82000	2113.0	.4000-01	.4800-01	.5410-01	.9220	.2749-02	.2034-02	.4550	2.806	522.2
275	305.40	.83000	2114.0	.3980-01	.4770-01	.5370-01	.9220	.2730-02	.2022-02	.4530	2.797	521.6
275	305.40	.83500	2115.0	.3930-01	.4710-01	.5310-01	.9220	.2698-02	.1997-02	.4470	2.779	522.0
286	305.40	.84000	857.00	.3960-01	.4720-01	.5290-01	.9220	.2690-02	.2014-02	.4690	2.942	517.7
273	305.40	.86000	859.00	.3830-01	.4650-01	.5270-01	.9220	.2677-02	.1946-02	.4120	2.607	529.8
273	305.40	.87000	860.00	.3810-01	.4630-01	.5250-01	.9220	.2668-02	.1935-02	.4070	2.581	531.1
273	305.40	.88000	861.00	.3790-01	.4600-01	.5220-01	.9220	.2650-02	.1924-02	.4060	2.574	530.5
273	305.40	.89000	862.00	.3720-01	.4520-01	.5130-01	.9220	.2606-02	.1889-02	.3970	2.529	531.5
273	305.40	.90000	863.00	.3310-01	.4020-01	.4570-01	.9220	.2323-02	.1683-02	.3530	2.264	531.7
273	305.40	.91000	864.00	.1820-01	.2200-01	.2500-01	.9220	.1271-02	.9226-03	.1950	1.427	530.7
273	305.40	.92600	865.00	.2980-01	.3620-01	.4120-01	.9220	.2090-02	.1511-02	.3160	2.305	532.7
273	309.30	.81000	867.00	.4200-01	.5090-01	.5790-01	.9220	.2940-02	.2131-02	.4480	2.821	531.5
273	309.30	.83000	869.00	.3030-01	.3670-01	.4170-01	.9220	.2119-02	.1538-02	.3240	2.049	530.8
273	315.00	.50000-01	871.00	.4119	.5187	.5040	.9556	.2559-01	.2091-01	3.765	23.89	561.7
273	315.00	.60000-01	872.00	.3450	.4311	.4263	.9522	.2165-01	.1752-01	3.252	21.50	556.0
286	315.00	.70000-01	873.00	.3075	.3743	.3759	.9491	.1911-01	.1563-01	3.285	22.42	540.4
286	315.00	.80000-01	874.00	.2529	.3057	.3109	.9460	.1581-01	.1286-01	2.791	19.84	533.5
286	315.00	.10000+00	875.00	.2149	.2580	.2683	.9405	.1364-01	.1092-01	2.450	16.25	526.3
286	315.00	.15000	876.00	.1223	.1458	.1581	.9298	.8037-02	.6218-02	1.448	10.75	517.7
286	315.00	.20000	877.00	.6420-01	.7580-01	.8390-01	.9236	.4266-02	.3264-02	.7970	5.485	506.4
286	315.00	.35000	878.00	.4840-01	.5750-01	.6430-01	.9220	.3268-02	.2462-02	.5850	3.696	513.1
286	315.00	.40000	879.00	.4660-01	.5530-01	.6170-01	.9220	.3137-02	.2367-02	.5650	3.643	512.0
286	315.00	.50000	880.00	.3970-01	.4740-01	.5330-01	.9220	.2709-02	.2017-02	.4630	3.218	521.2

IH72, AEDC V41A-R2A, INTEGRATED VEHICLE HEATING RATES

IH72, EXTERNAL TANK CLEAN, HU/HREF

(RVZT45)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
286	315.00	.55000	881.00	.3520-01	.4220-01	.4750-01	.9220	.2413-02	.1792-02	.4080	2.751	522.9
286	315.00	.60000	882.00	.4300-01	.5130-01	.5750-01	.9220	.2922-02	.2189-02	.5100	3.482	517.3
286	315.00	.65000	883.00	.4330-01	.5150-01	.5760-01	.9220	.2931-02	.2200-02	.5170	3.581	515.8
286	315.00	.70000	884.00	.4050-01	.4840-01	.5440-01	.9220	.2765-02	.2061-02	.4740	3.413	520.6
286	315.00	.75000	885.00	.3640-01	.4360-01	.4900-01	.9220	.2492-02	.1853-02	.4230	2.698	522.3
286	315.00	.80000	886.00	.4020-01	.4790-01	.5360-01	.9220	.2725-02	.2045-02	.4800	3.061	516.0
286	315.00	.84000	887.00	.3960-01	.4720-01	.5280-01	.9220	.2685-02	.2015-02	.4730	3.019	515.9
273	315.00	.85000	888.00	.3740-01	.4540-01	.5150-01	.9220	.2614-02	.1900-02	.4020	2.571	530.0
273	315.00	.87000	890.00	.3710-01	.4490-01	.5100-01	.9220	.2590-02	.1881-02	.3980	2.550	530.3
273	315.00	.88000	891.00	.3670-01	.4450-01	.5050-01	.9220	.2567-02	.1861-02	.3920	2.524	531.2
273	315.00	.89000	892.00	.3610-01	.4390-01	.4990-01	.9220	.2531-02	.1834-02	.3850	2.527	531.6
273	315.00	.90000	893.00	.3300-01	.4010-01	.4560-01	.9220	.2317-02	.1675-02	.3500	2.319	532.9
273	315.00	.91000	894.00	.1700-01	.2060-01	.2340-01	.9220	.1187-02	.8617-03	.1820	1.336	530.8
273	315.00	.92600	895.00	.2820-01	.3430-01	.3910-01	.9220	.1984-02	.1433-02	.2980	2.184	533.5
273	322.30	.42000	897.00	.4200-01	.5080-01	.5750-01	.9220	.2920-02	.2134-02	.4590	2.981	526.7
273	322.30	.43500	898.00	.4630-01	.5600-01	.6340-01	.9220	.3220-02	.2352-02	.5050	3.189	526.9
273	322.30	.45000	899.00	.4090-01	.4950-01	.5620-01	.9220	.2852-02	.2078-02	.4430	2.927	528.4
273	322.30	.50000	900.00	.3890-01	.4740-01	.5400-01	.9220	.2744-02	.1977-02	.4090	2.744	534.6
273	322.30	.60000	901.00	.4210-01	.5110-01	.5800-01	.9220	.2943-02	.2138-02	.4520	3.026	530.3
273	322.30	.70000	902.00	.4010-01	.4880-01	.5550-01	.9220	.2819-02	.2039-02	.4260	2.928	532.7
275	324.45	.41000	2110.0	.4330-01	.5170-01	.5810-01	.9220	.2954-02	.2200-02	.5010	3.205	517.9
275	324.45	.92600	2164.0	.2420-01	.2900-01	.3270-01	.9220	.1663-02	.1229-02	.2740	1.975	522.5
275	326.85	.40500	2108.0	.4570-01	.5450-01	.6120-01	.9220	.3110-02	.2322-02	.5330	3.411	516.2
274	326.85	.44000	2021.0	.4050-01	.4860-01	.5470-01	.9220	.2778-02	.2058-02	.4610	2.967	520.5
274	326.85	.54600	2024.0	.1780-01	.2150-01	.2420-01	.9220	.1233-02	.9061-03	.1990	1.345	525.1
274	326.85	.58100	2025.0	.3930-01	.4740-01	.5370-01	.9220	.2728-02	.1998-02	.4340	3.063	527.3
274	326.85	.61600	2026.0	.4220-01	.5080-01	.5740-01	.9220	.2915-02	.2144-02	.4710	3.308	524.8
274	326.85	.65200	2027.0	.4150-01	.4980-01	.5620-01	.9220	.2855-02	.2108-02	.4680	3.293	522.4
274	326.85	.68600	2028.0	.4340-01	.5220-01	.5890-01	.9220	.2993-02	.2204-02	.4850	3.445	524.1
274	326.85	.72260	2029.0	.2870-01	.3450-01	.3900-01	.9220	.1984-02	.1457-02	.3180	2.243	525.8
274	326.85	.75790	2030.0	.2300-01	.2770-01	.3130-01	.9220	.1593-02	.1171-02	.2570	1.658	525.2
274	326.85	.79310	2031.0	.4110-01	.4940-01	.5580-01	.9220	.2837-02	.2087-02	.4580	2.905	524.7
274	326.85	.82830	2032.0	.4060-01	.4890-01	.5520-01	.9220	.2808-02	.2065-02	.4530	2.898	524.8
274	326.85	.86350	2033.0	.4130-01	.4960-01	.5600-01	.9220	.2846-02	.2097-02	.4620	2.932	523.8
274	326.85	.90000	2034.0	.4250-01	.5120-01	.5780-01	.9220	.2936-02	.2159-02	.4740	2.977	524.9
275	326.85	.92600	2163.0	.2370-01	.2840-01	.3200-01	.9220	.1628-02	.1202-02	.2680	1.925	523.1
274	326.85	.93390	2035.0	.3330-01	.4020-01	.4540-01	.9220	.2309-02	.1691-02	.3670	2.484	527.3
275	330.20	.40000	2104.0	.4640-01	.5550-01	.6230-01	.9220	.3165-02	.2359-02	.5380	3.443	517.5
275	330.20	.40500	2105.0	.4820-01	.5760-01	.6470-01	.9220	.3287-02	.2452-02	.5620	3.596	516.6
275	330.20	.41000	2106.0	.4710-01	.5630-01	.6320-01	.9220	.3213-02	.2395-02	.5480	3.494	517.1
273	330.20	.42000	905.00	.4400-01	.5310-01	.6010-01	.9220	.3054-02	.2234-02	.4820	3.138	526.2
273	330.20	.43500	906.00	.4120-01	.4980-01	.5640-01	.9220	.2866-02	.2091-02	.4480	2.932	527.6
273	330.20	.45000	907.00	.4040-01	.4900-01	.5550-01	.9220	.2820-02	.2054-02	.4370	2.880	528.7

IH72. EXTERNAL TANK CLEAN.

HU/HREF

(RVZT45)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
273	330.20	.50000	908.00	.3610-01	.4400-01	.5010-01	.9220	.2545-02	.1832-02	.3780	2.724	535.1
273	330.20	.60000	909.00	.4070-01	.4940-01	.5610-01	.9220	.2850-02	.2066-02	.4340	2.865	531.4
273	330.20	.70000	910.00	.4000-01	.4870-01	.5540-01	.9220	.2814-02	.2031-02	.4230	2.868	533.7
273	330.20	.80000	911.00	.3160-01	.3840-01	.4370-01	.9220	.2218-02	.1606-02	.3370	2.174	532.1
275	330.20	.87000	912.00	.6400-02	.7700-02	.8800-02	.9220	.4470-03	.3232-03	.6800-01	.4350	532.8
275	334.98	.92600	2162.0	.2150-01	.2590-01	.2920-01	.9220	.1483-02	.1095-02	.2430	1.743	523.6
273	334.98	.92600	2161.0	.2280-01	.2740-01	.3090-01	.9220	.1570-02	.1156-02	.2550	1.823	524.9
273	334.98	.93500	913.00	.2940-01	.3580-01	.4090-01	.9220	.2075-02	.1492-02	.3070	2.248	535.7
273	334.98	.94500	914.00	.2000-01	.2440-01	.2780-01	.9220	.1414-02	.1018-02	.2100	1.522	535.2
273	337.50	.40000-01	915.00	.4382	.5544	.5287	.9592	.2685-01	.2225-01	3.938	24.74	564.7
273	337.50	.50000-01	916.00	.4085	.5130	.4987	.9556	.2532-01	.2074-01	3.774	24.18	559.7
273	337.50	.70000-01	918.00	.1273	.1518	.1524	.9490	.7738-02	.6466-02	1.487	10.53	511.7
273	337.50	.80000-01	919.00	.2676	.3287	.3348	.9460	.1700-01	.1359-01	2.714	18.56	542.0
273	337.50	.10000+00	920.00	.2081	.2531	.2640	.9404	.1340-01	.1057-01	2.205	14.83	533.1
273	337.50	.15000	921.00	.1159	.1400	.1529	.9297	.7766-02	.5887-02	1.268	9.284	526.3
273	337.50	.20000	922.00	.6500-01	.7790-01	.8700-01	.9236	.4417-02	.3300-02	.7400	5.000	517.6
273	337.50	.42000	923.00	.3990-01	.4820-01	.5460-01	.9220	.2773-02	.2025-02	.4340	2.861	527.2
275	337.50	.42500	2167.0	.4370-01	.5230-01	.5870-01	.9220	.2982-02	.2223-02	.5090	3.329	517.0
273	337.50	.43500	924.00	.4280-01	.5180-01	.5870-01	.9220	.2979-02	.2173-02	.4650	3.071	527.8
273	337.50	.85000	926.00	.3610-01	.4370-01	.4970-01	.9220	.2522-02	.1831-02	.3870	2.522	530.5
273	337.50	.86000	927.00	.3670-01	.4450-01	.5050-01	.9220	.2566-02	.1863-02	.3940	2.574	530.4
273	337.50	.87000	928.00	.3680-01	.4470-01	.5070-01	.9220	.2577-02	.1870-02	.3950	2.589	530.7
273	337.50	.88000	929.00	.3170-01	.3800-01	.4280-01	.9220	.2172-02	.1612-02	.3610	2.400	517.5
273	337.50	.89000	930.00	.3610-01	.4400-01	.5020-01	.9220	.2547-02	.1834-02	.3790	2.511	535.0
273	337.50	.90000	931.00	.2980-01	.3630-01	.4150-01	.9220	.2105-02	.1513-02	.3110	2.108	536.1
273	337.50	.91000	932.00	.1740-01	.2110-01	.2410-01	.9220	.1222-02	.8812-03	.1830	1.346	534.3
286	337.50	.92600	933.00	.2190-01	.2620-01	.2940-01	.9220	.1494-02	.1112-02	.2550	1.883	521.4
286	343.12	.41500	934.00	.4810-01	.5700-01	.6350-01	.9220	.3230-02	.2444-02	.5880	3.888	509.9
286	343.12	.42000	935.00	.4610-01	.5460-01	.6100-01	.9220	.3100-02	.2342-02	.5610	3.738	511.0
286	343.12	.42500	936.00	.4500-01	.5330-01	.5950-01	.9220	.3025-02	.2288-02	.5500	3.677	510.3
286	343.12	.44500	939.00	.4170-01	.4950-01	.5520-01	.9220	.2807-02	.2120-02	.5080	3.432	511.2
286	343.12	.45000	940.00	.4150-01	.4930-01	.5500-01	.9220	.2796-02	.2112-02	.5060	3.419	511.2
286	343.12	.50000	941.00	.4040-01	.4840-01	.5430-01	.9220	.2762-02	.2056-02	.4710	3.237	521.4
286	343.12	.60000	942.00	.4440-01	.5290-01	.5930-01	.9220	.3014-02	.2258-02	.5270	3.450	517.2
286	343.12	.80000	944.00	.3830-01	.4580-01	.5130-01	.9220	.2610-02	.1950-02	.4510	2.984	519.2
275	345.56	.42500	2168.0	.4440-01	.5300-01	.5950-01	.9220	.3026-02	.2257-02	.5170	3.383	516.8
275	345.56	.92600	2160.0	.2410-01	.2900-01	.3270-01	.9220	.1664-02	.1226-02	.2710	1.934	524.8
286	348.00	.35000	945.00	.4580-01	.5430-01	.6060-01	.9220	.3080-02	.2327-02	.5570	3.593	511.2
286	348.00	.36000	946.00	.4540-01	.5390-01	.6010-01	.9220	.3057-02	.2309-02	.5530	3.578	511.2
286	348.00	.37000	947.00	.4380-01	.5190-01	.5790-01	.9220	.2944-02	.2227-02	.5360	3.480	510.0
273	348.00	.37500	948.00	.4360-01	.5270-01	.5960-01	.9220	.3027-02	.2213-02	.4760	3.067	526.5
273	348.00	.38000	949.00	.4280-01	.5170-01	.5850-01	.9220	.2971-02	.2173-02	.4670	3.037	526.5
273	348.00	.38500	950.00	.4350-01	.5250-01	.5940-01	.9220	.3018-02	.2207-02	.4750	3.095	526.4

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT45)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
273	348.00	.39000	951.00	.4460-01	.5390-01	.6100-01	.9220	.3097-02	.2264-02	.4870	3.193	526.5
273	348.00	.39500	952.00	.4320-01	.5220-01	.5910-01	.9220	.2999-02	.2192-02	.4710	3.042	526.8
273	348.00	.40000	953.00	.4280-01	.5170-01	.5850-01	.9220	.2970-02	.2172-02	.4680	3.074	526.4
273	348.00	.40500	954.00	.4930-01	.5960-01	.6750-01	.9220	.3428-02	.2503-02	.5370	3.535	527.3
273	348.00	.41000	955.00	.4300-01	.5200-01	.5890-01	.9220	.2991-02	.2185-02	.4690	3.090	527.1
273	348.00	.42000	957.00	.4110-01	.4970-01	.5630-01	.9220	.2858-02	.2087-02	.4480	2.970	527.1
273	348.00	.42500	958.00	.4000-01	.4840-01	.5480-01	.9220	.2782-02	.2032-02	.4360	2.887	527.3
273	348.00	.43000	959.00	.4020-01	.4860-01	.5510-01	.9220	.2795-02	.2043-02	.4390	2.902	526.8
273	348.00	.44000	960.00	.4220-01	.5100-01	.5770-01	.9220	.2931-02	.2143-02	.4610	3.057	526.5
273	348.00	.44500	961.00	.4070-01	.4930-01	.5580-01	.9220	.2834-02	.2068-02	.4430	2.935	527.6
273	348.00	.85000	968.00	.3820-01	.4630-01	.5270-01	.9220	.2674-02	.1938-02	.4070	2.662	531.6
273	348.00	.86000	969.00	.3980-01	.4840-01	.5500-01	.9220	.2793-02	.2021-02	.4230	2.769	532.6
274	348.00	.89000	972.00	.3660-01	.4430-01	.5020-01	.9220	.2554-02	.1862-02	.3990	2.674	530.0
274	348.00	.91000	974.00	.1840-01	.2220-01	.2510-01	.9220	.1275-02	.9336-03	.2020	1.491	527.5
275	352.20	.93700	2089.0	.2120-01	.2550-01	.2880-01	.9220	.1466-02	.1076-02	.2350	1.662	527.1
275	354.00	.42500	2169.0	.4510-01	.5390-01	.6040-01	.9220	.3072-02	.2293-02	.5260	3.446	516.2
275	354.00	.43000	2174.0	.4320-01	.5160-01	.5790-01	.9220	.2942-02	.2195-02	.5030	3.294	516.6
275	354.00	.43500	2177.0	.4480-01	.5340-01	.5990-01	.9220	.3046-02	.2276-02	.5240	3.434	515.5
275	354.00	.44000	2179.0	.4420-01	.5270-01	.5920-01	.9220	.3007-02	.2245-02	.5150	3.373	516.3
275	355.16	.92600	2158.0	.1800-01	.2170-01	.2450-01	.9220	.1246-02	.9147-03	.2000	1.449	527.1

EXTERNAL TANK

PARAMETRIC DATA

ALPHA = 5.000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
279	4.990	-9.000	4.020	71.70	748.0	176.9	.4600	5.204	2620.	.2183-03	.1424-06	4.015
280	5.010	-9.100	4.020	71.80	750.0	177.1	.4600	5.208	2622.	.2180-03	.1426-06	4.008
281	4.980	-9.000	4.020	71.90	749.0	177.1	.4610	5.213	2621.	.2184-03	.1426-06	4.015
291	5.000	-9.000	4.020	71.80	751.0	177.3	.4610	5.212	2623.	.2180-03	.1428-06	4.004
292	5.000	-9.000	4.020	71.80	751.0	177.4	.4610	5.211	2624.	.2179-03	.1428-06	4.002
293	4.980	-9.000	4.020	71.80	750.0	177.3	.4610	5.210	2623.	.2180-03	.1427-06	4.005

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
279	.5080-01	.1148-01
280	.5083-01	.1148-01
281	.5085-01	.1147-01
291	.5086-01	.1149-01
292	.5085-01	.1149-01
293	.5084-01	.1149-01

TEST DATA

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
292	.00000	.25000-01	2187.0	.3797	.4949	.4834	.9539	.2458-01	.1931-01	3.115	21.54	589.4
291	.00000	.40000-01	600.00	.3056	.3834	.3828	.9503	.1947-01	.1554-01	2.876	18.32	565.5
291	.00000	.50000-01	601.00	.2935	.3657	.3711	.9470	.1887-01	.1493-01	2.839	18.18	560.4
291	.00000	.70000-01	603.00	.2268	.2794	.2914	.9412	.1482-01	.1153-01	2.296	15.63	551.4
291	.00000	.80000-01	604.00	.2179	.2668	.2813	.9385	.1431-01	.1108-01	2.267	14.75	546.0
291	.00000	.15000	606.00	.8070-01	.9640-01	.1065	.9256	.5418-02	.4102-02	.9430	6.948	520.6
291	.00000	.20000	607.00	.4240-01	.5050-01	.5640-01	.9221	.2869-02	.2158-02	.5090	3.377	514.6
291	.00000	.21000	608.00	.3560-01	.4260-01	.4790-01	.9220	.2437-02	.1810-02	.4120	2.883	522.9
291	.00000	.22000	609.00	.2780-01	.3330-01	.3740-01	.9220	.1904-02	.1416-02	.3240	2.438	522.1
291	.00000	.30000	610.00	.2290-01	.2750-01	.3090-01	.9220	.1570-02	.1166-02	.2650	1.839	522.9
291	.00000	.35000	611.00	.6000-03	.7000-03	.8000-03	.9220	.3887-04	.2850-04	.6000-02	.4200-01	531.0
291	.00000	.36000	612.00	.2400-01	.2860-01	.3200-01	.9220	.1625-02	.1222-02	.2880	1.969	514.7

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT46)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
291	.00000	.37500	614.00	.2430-01	.2890-01	.3230-01	.9220	.1645-02	.1238-02	.2930	1.999	514.2
293	.00000	.38000	615.00	.2340-01	.2790-01	.3130-01	.9220	.1591-02	.1191-02	.2770	1.893	517.3
293	.00000	.38500	616.00	.2320-01	.2770-01	.3100-01	.9220	.1577-02	.1181-02	.2750	1.878	517.2
293	.00000	.39000	617.00	.7000-03	.8000-03	.9000-03	.9220	.4609-04	.3383-04	.7000-02	.5000-01	530.3
293	.00000	.39500	618.00	.2150-01	.2560-01	.2870-01	.9220	.1458-02	.1092-02	.2540	1.740	517.3
293	.00000	.40000	619.00	.2360-01	.2810-01	.3140-01	.9220	.1599-02	.1197-02	.2790	1.900	517.0
293	.00000	.40500	620.00	.2290-01	.2720-01	.3050-01	.9220	.1548-02	.1164-02	.2740	1.873	514.6
293	.00000	.41000	621.00	.2370-01	.2820-01	.3150-01	.9220	.1604-02	.1205-02	.2830	1.936	515.1
293	.00000	.41500	622.00	.2350-01	.2800-01	.3140-01	.9220	.1595-02	.1196-02	.2800	1.903	516.4
293	.00000	.43000	625.00	.2160-01	.2570-01	.2870-01	.9220	.1461-02	.1099-02	.2600	1.777	513.7
293	.00000	.44000	626.00	.2040-01	.2420-01	.2710-01	.9220	.1378-02	.1038-02	.2460	1.683	513.0
293	.00000	.44500	627.00	.2060-01	.2450-01	.2740-01	.9220	.1391-02	.1048-02	.2490	1.715	513.1
293	.00000	.45000	628.00	.2070-01	.2460-01	.2750-01	.9220	.1397-02	.1053-02	.2500	1.725	512.8
293	.00000	.45500	629.00	.2010-01	.2390-01	.2670-01	.9220	.1356-02	.1022-02	.2430	1.702	512.6
291	.00000	.46000	630.00	.1910-01	.2270-01	.2540-01	.9220	.1293-02	.9729-03	.2300	1.572	514.1
291	.00000	.47000	631.00	.1890-01	.2250-01	.2510-01	.9220	.1277-02	.9603-03	.2270	1.549	514.4
291	.00000	.48000	632.00	.1850-01	.2210-01	.2470-01	.9220	.1257-02	.9419-03	.2200	1.510	517.1
291	.00000	.49000	633.00	.1670-01	.1980-01	.2220-01	.9220	.1128-02	.8474-03	.2000	1.385	514.9
291	.00000	.50000	634.00	.1370-01	.1620-01	.1820-01	.9220	.9235-03	.6954-03	.1650	1.173	513.5
291	.00000	.55000	635.00	.1080-01	.1280-01	.1430-01	.9220	.7287-03	.5495-03	.1310	.8840	512.5
291	.00000	.60000	636.00	.1500-01	.1780-01	.1990-01	.9220	.1013-02	.7621-03	.1800	1.181	514.2
291	.00000	.65000	637.00	.1560-01	.1850-01	.2060-01	.9220	.1049-02	.7909-03	.1880	1.240	512.4
291	.00000	.70000	638.00	.1010-01	.1200-01	.1340-01	.9220	.6835-03	.5148-03	.1220	.8500	513.4
291	.00000	.75000	639.00	.6800-02	.8100-02	.9100-02	.9220	.4603-03	.3476-03	.8300-01	.5460	511.5
291	.00000	.80000	640.00	.1710-01	.2030-01	.2260-01	.9220	.1152-02	.8672-03	.2060	1.310	513.6
291	.00000	.85000	641.00	.2010-01	.2400-01	.2680-01	.9220	.1364-02	.1025-02	.2410	1.550	515.0
291	.00000	.86000	642.00	.8000-02	.8600-02	.9000-02	.9220	.4553-03	.4078-03	.2290	1.790	189.5
291	.00000	.87000	643.00	.2330-01	.2780-01	.3110-01	.9220	.1583-02	.1186-02	.2770	1.812	517.1
291	.00000	.88000	644.00	.2540-01	.3030-01	.3390-01	.9220	.1726-02	.1291-02	.3000	1.981	518.1
293	.00000	.89000	645.00	.2890-01	.3450-01	.3880-01	.9220	.1974-02	.1468-02	.3350	2.232	522.0
293	.00000	.90000	646.00	.8600-02	.9500-02	.1000-01	.9220	.5093-03	.4387-03	.1850	1.398	328.4
293	.00000	.92600	648.00	.2630-01	.3150-01	.3530-01	.9220	.1797-02	.1338-02	.3060	2.262	521.3
293	.00000	.95000	649.00	.3110-01	.3730-01	.4190-01	.9220	.2131-02	.1582-02	.3600	2.656	522.9
281	5.6250	.42500	2170.0	.2180-01	.2590-01	.2900-01	.9220	.1475-02	.1109-02	.2610	1.728	513.8
281	5.6250	.43500	2178.0	.1990-01	.2370-01	.2650-01	.9220	.1347-02	.1013-02	.2390	1.582	513.4
293	11.250	.35000	650.00	.2110-01	.2520-01	.2820-01	.9220	.1435-02	.1074-02	.2500	1.702	517.8
293	11.250	.37000	652.00	.2190-01	.2610-01	.2920-01	.9220	.1483-02	.1112-02	.2600	1.771	516.8
293	11.250	.38000	654.00	.2140-01	.2550-01	.2860-01	.9220	.1453-02	.1090-02	.2550	1.749	515.9
293	11.250	.39500	657.00	.2100-01	.2500-01	.2800-01	.9220	.1424-02	.1070-02	.2520	1.724	514.9
293	11.250	.40500	659.00	.2120-01	.2520-01	.2820-01	.9220	.1432-02	.1076-02	.2530	1.741	514.8
293	11.250	.41000	660.00	.2040-01	.2420-01	.2710-01	.9220	.1378-02	.1036-02	.2440	1.674	514.6
293	11.250	.41500	661.00	.1960-01	.2330-01	.2610-01	.9220	.1325-02	.9962-03	.2350	1.607	514.1
293	11.250	.42000	662.00	.2070-01	.2460-01	.2750-01	.9220	.1397-02	.1050-02	.2470	1.696	514.6

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT46)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
293	11.250	.42500	663.00	.1970-01	.2340-01	.2620-01	.9220	.1330-02	.1000-02	.2360	1.621	514.4
293	11.250	.43000	664.00	.1800-01	.2130-01	.2390-01	.9220	.1213-02	.9139-03	.2170	1.506	512.9
293	11.250	.44000	665.00	.1680-01	.2000-01	.2230-01	.9220	.1136-02	.8553-03	.2030	1.398	513.3
293	11.250	.45000	666.00	.1750-01	.2080-01	.2320-01	.9220	.1180-02	.8892-03	.2110	1.459	512.5
293	11.250	.45500	667.00	.1790-01	.2120-01	.2370-01	.9220	.1206-02	.9086-03	.2150	1.486	513.2
293	11.250	.46000	668.00	.1630-01	.1940-01	.2160-01	.9220	.1101-02	.8292-03	.1970	1.361	513.0
293	11.250	.47000	669.00	.1750-01	.2080-01	.2330-01	.9220	.1185-02	.8916-03	.2110	1.463	513.9
293	11.250	.48000	670.00	.1730-01	.2050-01	.2290-01	.9220	.1166-02	.8775-03	.2070	1.439	514.0
293	11.250	.49000	671.00	.1500-01	.1780-01	.2000-01	.9220	.1015-02	.7629-03	.1800	1.244	514.5
293	11.250	.50000	672.00	.1300-01	.1550-01	.1730-01	.9220	.8787-03	.6609-03	.1560	1.103	514.1
293	11.250	.70000	674.00	.1220-01	.1450-01	.1620-01	.9220	.8257-03	.6197-03	.1450	1.005	515.6
293	11.250	.85000	676.00	.2040-01	.2430-01	.2720-01	.9220	.1383-02	.1035-02	.2410	1.552	517.8
293	11.250	.86000	677.00	.2290-01	.2740-01	.3070-01	.9220	.1560-02	.1165-02	.2690	1.746	519.1
293	11.250	.87000	678.00	.2460-01	.2940-01	.3300-01	.9220	.1680-02	.1252-02	.2880	1.880	520.5
293	11.250	.88000	679.00	.2820-01	.3370-01	.3790-01	.9220	.1925-02	.1433-02	.3280	2.164	521.6
293	11.250	.90000	681.00	.2730-01	.3260-01	.3660-01	.9220	.1863-02	.1386-02	.3170	2.165	521.6
293	11.250	.91000	682.00	.1740-01	.2070-01	.2320-01	.9220	.1181-02	.8849-03	.2070	1.530	516.7
293	11.250	.92600	683.00	.3170-01	.3790-01	.4260-01	.9220	.2166-02	.1611-02	.3670	2.722	522.2
293	11.250	.95000	684.00	.3780-01	.4530-01	.5100-01	.9220	.2595-02	.1920-02	.4320	3.152	525.4
293	17.000	.33000	685.00	.2090-01	.2490-01	.2790-01	.9220	.1420-02	.1061-02	.2450	1.673	518.8
293	17.000	.34000	686.00	.2130-01	.2540-01	.2840-01	.9220	.1445-02	.1081-02	.2510	1.712	518.0
293	17.000	.35000	687.00	.2140-01	.2550-01	.2860-01	.9220	.1453-02	.1089-02	.2540	1.732	517.0
281	17.000	.35500	2102.0	.2310-01	.2750-01	.3070-01	.9220	.1563-02	.1173-02	.2740	1.825	515.3
293	17.000	.36000	688.00	.2120-01	.2530-01	.2830-01	.9220	.1438-02	.1079-02	.2530	1.724	516.1
293	17.000	.37000	689.00	.2150-01	.2560-01	.2860-01	.9220	.1456-02	.1092-02	.2560	1.746	516.1
293	17.000	.37500	690.00	.2080-01	.2470-01	.2760-01	.9220	.1405-02	.1055-02	.2480	1.697	515.4
281	17.000	.42500	2171.0	.1940-01	.2300-01	.2570-01	.9220	.1307-02	.9849-03	.2340	1.525	512.0
281	17.000	.43000	2176.0	.2000-01	.2370-01	.2650-01	.9220	.1347-02	.1016-02	.2420	1.605	511.0
291	17.000	.50000	691.00	.1660-01	.1970-01	.2190-01	.9220	.1115-02	.8435-03	.2030	1.387	510.4
291	17.000	.60000	692.00	.1830-01	.2170-01	.2420-01	.9220	.1229-02	.9302-03	.2240	1.471	509.9
291	17.000	.70000	693.00	.1130-01	.1340-01	.1500-01	.9220	.7616-03	.5758-03	.1380	.9540	510.6
291	17.000	.80000	694.00	.1610-01	.1910-01	.2130-01	.9220	.1081-02	.8176-03	.1960	1.256	510.5
291	17.000	.92600	696.00	.3160-01	.3760-01	.4210-01	.9220	.2140-02	.1607-02	.3780	2.807	515.5
281	20.980	.36000	2099.0	.2060-01	.2450-01	.2740-01	.9220	.1395-02	.1048-02	.2470	1.652	514.0
281	20.980	.36500	2100.0	.2080-01	.2470-01	.2760-01	.9220	.1402-02	.1056-02	.2490	1.671	513.0
281	23.070	.36000	2095.0	.1990-01	.2360-01	.2640-01	.9220	.1343-02	.1011-02	.2390	1.599	513.1
281	23.070	.36500	2096.0	.1960-01	.2320-01	.2600-01	.9220	.1321-02	.9952-03	.2360	1.578	512.6
280	23.070	.43500	2000.0	.1950-01	.2320-01	.2600-01	.9220	.1322-02	.9923-03	.2330	1.515	515.2
280	23.070	.56890	2001.0	.1060-01	.1270-01	.1420-01	.9220	.7236-03	.5409-03	.1250	.8700	518.0
280	23.070	.70270	2002.0	.1140-01	.1360-01	.1520-01	.9220	.7717-03	.5788-03	.1350	.9810	515.7
280	23.070	.83500	2003.0	.1460-01	.1740-01	.1950-01	.9220	.9901-03	.7422-03	.1730	1.119	516.1
280	23.070	.90000	2004.0	.2090-01	.2500-01	.2810-01	.9220	.1427-02	.1062-02	.2430	1.655	521.0
281	23.070	.92600	2154.0	.1970-01	.2360-01	.2650-01	.9220	.1347-02	.1001-02	.2280	1.643	521.9

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT46)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
291	29.800	.70000-01	700.00	.1974	.2411	.2564	.9365	.1304-01	.1004-01	2.079	14.09	543.4
291	29.800	.10000+00	701.00	.1594	.1914	.2080	.9300	.1058-01	.8109-02	1.822	11.74	525.8
291	29.800	.15000	702.00	.6060-01	.7190-01	.7970-01	.9236	.4054-02	.3082-02	.7380	5.377	511.1
291	29.800	.20000	703.00	.2550-01	.3020-01	.3360-01	.9220	.1710-02	.1299-02	.3160	2.148	507.2
291	29.800	.30000	704.00	.9000-02	.1070-01	.1190-01	.9220	.6060-03	.4554-03	.1070	.7730	514.9
291	29.800	.35000	705.00	.1870-01	.2220-01	.2470-01	.9220	.1258-02	.9509-03	.2280	1.588	511.0
281	29.800	.35500	2090.0	.1930-01	.2300-01	.2570-01	.9220	.1305-02	.9825-03	.2320	1.555	513.0
281	29.800	.36500	2092.0	.1960-01	.2330-01	.2610-01	.9220	.1325-02	.9986-03	.2370	1.584	511.9
281	29.800	.37000	2093.0	.1730-01	.2050-01	.2290-01	.9220	.1165-02	.8803-03	.2110	1.413	510.0
293	29.800	.50000	707.00	.1470-01	.1750-01	.1950-01	.9220	.9923-03	.7467-03	.1770	1.229	513.8
293	29.800	.60000	708.00	.1640-01	.1950-01	.2180-01	.9220	.1107-02	.8352-03	.1990	1.290	512.1
293	29.800	.70000	709.00	.1260-01	.1490-01	.1670-01	.9220	.8480-03	.6405-03	.1530	.9940	511.1
293	29.800	.80000	710.00	.1310-01	.1550-01	.1740-01	.9220	.8825-03	.6656-03	.1580	1.005	512.2
281	31.430	.44000	2166.0	.1840-01	.2180-01	.2430-01	.9220	.1237-02	.9345-03	.2230	1.509	510.6
280	31.430	.47600	2005.0	.1840-01	.2190-01	.2460-01	.9220	.1248-02	.9366-03	.2190	1.480	515.5
280	31.430	.51100	2006.0	.1710-01	.2040-01	.2290-01	.9220	.1164-02	.8711-03	.2020	1.406	517.3
280	31.430	.54600	2007.0	.1030-01	.1220-01	.1370-01	.9220	.6949-03	.5248-03	.1250	.8960	510.7
280	31.430	.61600	2009.0	.1640-01	.1940-01	.2170-01	.9220	.1105-02	.8322-03	.1970	1.375	512.5
280	31.430	.65000	2010.0	.1500-01	.1780-01	.1990-01	.9220	.1013-02	.7638-03	.1820	1.285	512.0
280	31.430	.68600	2014.0	.1280-01	.1520-01	.1700-01	.9220	.8632-03	.6488-03	.1530	1.083	514.3
280	31.430	.72050	2015.0	.6500-02	.7700-02	.8500-02	.9220	.4343-03	.3289-03	.7900-01	.5990	508.6
280	31.430	.79040	2017.0	.1180-01	.1400-01	.1570-01	.9220	.7980-03	.6003-03	.1420	.9100	513.7
280	31.430	.86000	2019.0	.2700-02	.3300-02	.3700-02	.9220	.1889-03	.1388-03	.3100-01	.1990	529.4
280	31.430	.89520	2020.0	.2170-01	.2600-01	.2910-01	.9220	.1481-02	.1105-02	.2540	1.676	519.6
281	31.430	.92600	2153.0	.2260-01	.2700-01	.3030-01	.9220	.1541-02	.1147-02	.2620	1.938	520.7
280	33.750	.25000	2079.0	.9100-02	.1100-01	.1240-01	.9220	.6277-03	.4645-03	.1040	.8670	524.7
280	33.750	.30000	2080.0	.9800-02	.1170-01	.1320-01	.9220	.6700-03	.4971-03	.1130	.7510	523.0
280	33.750	.37500	2081.0	.1920-01	.2280-01	.2550-01	.9220	.1298-02	.9763-03	.2300	1.556	513.6
280	33.750	.40000	2082.0	.2020-01	.2400-01	.2680-01	.9220	.1362-02	.1024-02	.2410	1.630	514.0
280	33.750	.43000	2083.0	.2070-01	.2460-01	.2750-01	.9220	.1398-02	.1052-02	.2480	1.678	513.5
280	33.750	.45000	2084.0	.1800-01	.2140-01	.2400-01	.9220	.1217-02	.9158-03	.2160	1.460	513.6
280	33.750	.60000	2085.0	.1790-01	.2130-01	.2380-01	.9220	.1210-02	.9091-03	.2140	1.443	514.5
281	33.750	.65000	2086.0	.1580-01	.1870-01	.2090-01	.9220	.1063-02	.8046-03	.1940	1.323	508.7
281	33.750	.92600	2152.0	.2470-01	.2950-01	.3310-01	.9220	.1685-02	.1255-02	.2870	2.122	520.6
280	36.320	.25000	2066.0	.2150-01	.2550-01	.2860-01	.9220	.1452-02	.1091-02	.2560	1.731	514.6
280	36.320	.35000	2069.0	.1570-01	.1870-01	.2100-01	.9220	.1065-02	.7987-03	.1870	1.259	515.9
280	36.320	.37500	2070.0	.1810-01	.2150-01	.2400-01	.9220	.1222-02	.9187-03	.2170	1.463	513.8
280	36.320	.40000	2071.0	.1980-01	.2350-01	.2630-01	.9220	.1336-02	.1005-02	.2370	1.602	513.6
280	36.320	.42000	2072.0	.2100-01	.2500-01	.2800-01	.9220	.1421-02	.1068-02	.2510	1.697	514.2
280	36.320	.42500	2073.0	.2120-01	.2520-01	.2820-01	.9220	.1436-02	.1079-02	.2540	1.713	514.4
280	36.320	.43500	2075.0	.1980-01	.2350-01	.2630-01	.9220	.1336-02	.1004-02	.2360	1.593	514.5
280	36.320	.45000	2076.0	.2030-01	.2410-01	.2690-01	.9220	.1365-02	.1033-02	.2490	1.685	508.8
280	36.320	.60000	2077.0	.1700-01	.2020-01	.2260-01	.9220	.1148-02	.8639-03	.2040	1.392	513.3

IH72, EXTERNAL TANK CLEAN,

(RVZT46)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	HU/HREF H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
280	36.320	.65000	2078.0	.1800-01	.2140-01	.2390-01	.9220	.1213-02	.9145-03	.2170	1.513	512.2
293	37.700	.50000-01	715.00	.2831	.3585	.3763	.9411	.1913-01	.1439-01	2.569	16.55	571.8
293	37.700	.70000-01	716.00	.2174	.2685	.2877	.9358	.1463-01	.1105-01	2.179	14.82	553.1
293	37.700	.15000+00	717.00	.1433	.1723	.1879	.9295	.9552-02	.7285-02	1.623	10.63	527.4
293	37.700	.15000	718.00	.6110-01	.7260-01	.8070-01	.9233	.4103-02	.3106-02	.7350	5.473	513.5
293	37.700	.20000	719.00	.2630-01	.3120-01	.3470-01	.9220	.1765-02	.1339-02	.3250	2.233	507.7
293	37.700	.30000	720.00	.7400-02	.8800-02	.9800-02	.9220	.4999-03	.3746-03	.8700-01	.6350	516.7
291	37.700	.35000	721.00	.1530-01	.1810-01	.2020-01	.9220	.1027-02	.7777-03	.1880	1.327	509.0
291	37.700	.37500	722.00	.1990-01	.2360-01	.2620-01	.9220	.1334-02	.1013-02	.2460	1.740	507.5
291	37.700	.50000	723.00	.2510-01	.2970-01	.3310-01	.9220	.1681-02	.1276-02	.3100	2.185	507.6
291	37.700	.60000	724.00	.2130-01	.2520-01	.2810-01	.9220	.1429-02	.1084-02	.2640	1.719	507.5
291	37.700	.70000	725.00	.1680-01	.1990-01	.2220-01	.9220	.1127-02	.8546-03	.2070	1.343	508.2
291	37.700	.80000	726.00	.1510-01	.1780-01	.1990-01	.9220	.1011-02	.7655-03	.1840	1.181	509.7
291	37.700	.87000	727.00	.1810-01	.2150-01	.2400-01	.9220	.1221-02	.9180-03	.2170	1.408	514.6
291	37.700	.92600	728.00	.2930-01	.3490-01	.3910-01	.9220	.1988-02	.1491-02	.3490	2.577	516.4
292	39.000	.10000-01	993.00	.4624	.6161	.6233	.9483	.3170-01	.2351-01	3.537	25.04	600.3
292	39.000	.25000-01	994.00	.3116	.3939	.3995	.9474	.2031-01	.1585-01	2.848	19.14	571.0
292	39.000	.30000-01	995.00	-.7900-02	-.5400-02	-.5300-02	.9472	-.2677-03	-.4027-03	.3200-01	.1930	329.3
280	45.000	.25000	2036.0	.6500-02	.7800-02	.8800-02	.9220	.4465-03	.3309-03	.7500-01	.6120	523.7
280	45.000	.32500	2038.0	.1150-01	.1370-01	.1540-01	.9220	.7831-03	.5853-03	.1360	.9410	518.1
280	45.000	.35000	2039.0	.1570-01	.1870-01	.2090-01	.9220	.1061-02	.7964-03	.1870	1.278	515.3
280	45.000	.37500	2040.0	.2010-01	.2400-01	.2680-01	.9220	.1363-02	.1023-02	.2400	1.644	515.1
280	45.000	.40000	2041.0	.2450-01	.2920-01	.3270-01	.9220	.1660-02	.1246-02	.2920	1.998	515.5
280	45.000	.43000	2044.0	.2490-01	.2960-01	.3310-01	.9220	.1684-02	.1266-02	.2980	2.043	514.2
280	45.000	.43500	2045.0	.2480-01	.2960-01	.3310-01	.9220	.1681-02	.1263-02	.2970	2.034	514.6
280	45.000	.44000	2046.0	.2520-01	.2990-01	.3350-01	.9220	.1702-02	.1279-02	.3010	2.065	514.1
280	45.000	.45000	2047.0	.2540-01	.3020-01	.3380-01	.9220	.1715-02	.1289-02	.3030	2.091	514.4
280	45.000	.47000	2048.0	.2560-01	.3050-01	.3410-01	.9220	.1734-02	.1300-02	.3030	2.110	516.1
280	45.000	.55000	2049.0	.1460-01	.1730-01	.1940-01	.9220	.9849-03	.7403-03	.1740	1.217	514.1
280	45.000	.60000	2050.0	.2250-01	.2670-01	.3000-01	.9220	.1522-02	.1141-02	.2670	1.827	515.9
280	45.000	.65000	2051.0	.2330-01	.2770-01	.3100-01	.9220	.1578-02	.1185-02	.2790	1.887	514.6
280	45.000	.75000	2052.0	.1270-01	.1510-01	.1690-01	.9220	.8574-03	.6456-03	.1530	.9890	512.9
280	45.000	.80000	2053.0	.2910-01	.3460-01	.3880-01	.9220	.1970-02	.1477-02	.3450	2.205	515.8
280	45.000	.83000	2054.0	.2590-01	.3090-01	.3460-01	.9220	.1760-02	.1314-02	.3030	1.929	518.7
280	45.000	.84000	2055.0	.2650-01	.3160-01	.3550-01	.9220	.1802-02	.1345-02	.3110	1.974	518.8
280	45.000	.85000	2056.0	.2590-01	.3090-01	.3470-01	.9220	.1762-02	.1315-02	.3030	1.954	519.1
280	45.000	.86000	2057.0	.2670-01	.3190-01	.3580-01	.9220	.1819-02	.1357-02	.3130	2.064	519.1
280	45.000	.87000	2058.0	.2500-01	.2990-01	.3360-01	.9220	.1706-02	.1271-02	.2910	1.967	520.4
280	45.000	.89000	2060.0	.2560-01	.3070-01	.3460-01	.9220	.1757-02	.1302-02	.2940	1.986	524.0
280	45.000	.90000	2061.0	.1450-01	.1740-01	.1950-01	.9220	.9893-03	.7390-03	.1710	1.161	518.5
280	45.000	.91000	2062.0	.6600-02	.7900-02	.8900-02	.9220	.4547-03	.3365-03	.7600-01	.6260	524.8
280	45.000	.92600	2063.0	.1840-01	.2200-01	.2480-01	.9220	.1261-02	.9332-03	.2100	1.498	524.9
280	45.000	.93500	2064.0	.2730-01	.3290-01	.3710-01	.9220	.1887-02	.1386-02	.3050	2.298	529.4

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT46)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
280	45.000	.94500	2065.0	.4310-01	.5200-01	.5880-01	.9220	.2986-02	.2192-02	.4810	3.225	530.0
291	180.00	.15000-01	2182.0	.4906	.7395	.6067	.9716	.3085-01	.2495-01	2.782	19.98	639.1
291	180.00	.20000-01	2183.0	.4608	.6315	.5480	.9706	.2787-01	.2344-01	3.254	23.93	611.7
291	180.00	.25000-01	2184.0	.4199	.5478	.4868	.9706	.2476-01	.2135-01	3.432	24.50	589.8
291	180.00	.30000-01	2185.0	.3855	.5053	.4484	.9704	.2281-01	.1960-01	3.103	21.98	592.3
291	180.00	.40000-01	737.00	.2264	.2702	.2538	.9666	.1291-01	.1151-01	2.666	17.64	519.0
291	180.00	.45000-01	738.00	.3858	.4903	.4538	.9648	.2308-01	.1962-01	3.454	22.56	574.5
291	180.00	.50000-01	739.00	.3406	.4271	.4073	.9596	.2071-01	.1732-01	3.210	21.38	565.2
291	180.00	.70000-01	740.00	.3549	.4443	.4308	.9562	.2191-01	.1805-01	3.367	22.58	564.0
291	180.00	.80000-01	741.00	.2892	.3585	.3534	.9530	.1797-01	.1471-01	2.853	20.64	556.5
291	180.00	.10000+00	742.00	.2580	.3158	.3200	.9470	.1628-01	.1312-01	2.689	17.97	545.6
291	180.00	.12500	743.00	.2058	.2506	.2615	.9404	.1330-01	.1047-01	2.195	16.01	540.8
291	180.00	.15000	744.00	.1690	.2039	.2175	.9348	.1106-01	.8594-02	1.886	13.21	531.1
291	180.00	.17500	745.00	.1142	.1364	.1479	.9301	.7522-02	.5809-02	1.339	10.20	520.0
291	180.00	.20000	746.00	.8970-01	.1067	.1172	.9264	.5958-02	.4564-02	1.077	7.834	514.5
291	180.00	.21500	747.00	.7660-01	.9250-01	.1033	.9247	.5252-02	.3897-02	.8530	5.960	531.6
291	180.00	.23000	748.00	.6400-01	.7740-01	.8700-01	.9234	.4426-02	.3252-02	.7050	5.243	533.9
291	180.00	.24000	749.00	.5420-01	.6570-01	.7440-01	.9228	.3782-02	.2754-02	.5870	4.450	537.3
291	180.00	.25000	750.00	.2910-01	.3520-01	.3970-01	.9228	.2019-02	.1481-02	.3220	2.627	532.9
291	180.00	.35000	752.00	.6270-01	.7500-01	.8400-01	.9228	.4273-02	.3187-02	.7260	4.647	522.6
291	180.00	.40000	753.00	.6180-01	.7370-01	.8230-01	.9228	.4186-02	.3143-02	.7310	4.771	517.9
291	180.00	.50000	754.00	.5740-01	.6850-01	.7650-01	.9228	.3892-02	.2917-02	.6750	4.476	519.3
291	180.00	.60000	755.00	.5550-01	.6610-01	.7380-01	.9228	.3755-02	.2820-02	.6570	4.274	517.7
291	180.00	.70000	756.00	.5410-01	.6450-01	.7190-01	.9228	.3659-02	.2754-02	.6450	4.324	516.4
291	180.00	.80000	757.00	.5060-01	.6030-01	.6730-01	.9228	.3422-02	.2573-02	.6000	3.819	517.2
291	180.00	.90000	758.00	.3580-01	.4250-01	.4730-01	.9228	.2407-02	.1819-02	.4310	2.837	513.4
291	235.00	.22000	759.00	.9870-01	.1213	.1349	.9279	.6860-02	.5019-02	1.012	7.518	549.0
291	235.00	.25000	760.00	.4840-01	.5930-01	.6660-01	.9254	.3389-02	.2463-02	.5050	3.956	545.6
291	235.00	.27000	761.00	.4010-01	.4920-01	.5540-01	.9254	.2816-02	.2039-02	.4140	3.077	547.7
291	235.00	.30000	762.00	.8260-01	.1014	.1142	.9254	.5806-02	.4201-02	.8510	5.114	548.0
291	235.00	.32000	763.00	.8660-01	.1059	.1189	.9254	.6047-02	.4405-02	.9080	5.381	544.3
291	235.00	.34000	764.00	.8620-01	.1049	.1174	.9254	.5972-02	.4383-02	.9220	5.491	540.1
291	235.00	.36000	765.00	.8560-01	.1041	.1165	.9254	.5924-02	.4354-02	.9200	5.553	539.2
291	235.00	.38000	766.00	.8160-01	.9920-01	.1109	.9254	.5639-02	.4152-02	.8820	5.384	538.2
293	247.00	.23000	768.00	.9070-01	.1122	.1262	.9266	.6415-02	.4610-02	.9030	6.692	554.4
293	247.00	.25000	769.00	.4670-01	.5750-01	.6500-01	.9254	.3304-02	.2372-02	.4710	3.652	551.8
293	247.00	.27000	770.00	.5480-01	.6860-01	.7830-01	.9254	.3981-02	.2785-02	.5190	3.755	563.8
293	247.00	.30000	772.00	.7870-01	.9780-01	.1111	.9254	.5648-02	.4003-02	.7700	4.678	558.0
293	247.00	.31000	773.00	.8130-01	.1006	.1140	.9254	.5797-02	.4131-02	.8050	4.859	555.4
293	247.00	.32000	774.00	.8390-01	.1037	.1173	.9254	.5963-02	.4267-02	.8400	5.034	553.3
293	247.00	.32500	775.00	.7680-01	.9480-01	.1072	.9254	.5450-02	.3905-02	.7710	4.635	552.7
293	247.00	.33000	776.00	.8250-01	.1019	.1152	.9254	.5857-02	.4197-02	.8290	4.998	552.7
293	247.00	.33500	777.00	.8230-01	.1016	.1148	.9254	.5837-02	.4185-02	.8280	4.991	552.4

IH72, EXTERNAL TANK CLEAN,

HU/HREF

(RVZT46)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
293	247.00	.34000	778.00	.8110-01	.9990-01	.1128	.9254	.5734-02	.4123-02	.8220	4.957	550.9
293	247.00	.34500	779.00	.8040-01	.9900-01	.1118	.9254	.5683-02	.4090-02	.8170	4.942	550.5
293	247.00	.35000	780.00	.7930-01	.9750-01	.1100	.9254	.5592-02	.4032-02	.8100	4.914	549.5
291	247.00	.36000	782.00	.8210-01	.9990-01	.1119	.9254	.5693-02	.4173-02	.8750	5.352	540.8
291	247.00	.36500	783.00	.8250-01	.1004	.1124	.9254	.5716-02	.4198-02	.8850	5.401	539.7
291	247.00	.37000	784.00	.8020-01	.9740-01	.1089	.9254	.5536-02	.4079-02	.8680	5.326	537.9
291	247.00	.37500	785.00	.1000-02	.1200-02	.1300-02	.9254	.6831-04	.5089-04	.1100-01	.6900-01	531.0
291	247.00	.38000	786.00	.8140-01	.9890-01	.1107	.9254	.5629-02	.4137-02	.8740	5.423	539.2
291	247.00	.39000	787.00	.8280-01	.1006	.1125	.9254	.5722-02	.4210-02	.8920	5.550	538.7
291	247.00	.40000	788.00	.8220-01	.1000+00	.1120	.9254	.5698-02	.4179-02	.8780	5.503	540.5
292	247.00	.50000	789.00	.7850-01	.9650-01	.1087	.9254	.5529-02	.3992-02	.8040	5.150	549.2
292	247.00	.60000	790.00	.8520-01	.1040	.1166	.9254	.5928-02	.4333-02	.9020	5.933	542.5
292	247.00	.70000	791.00	.7710-01	.9390-01	.1052	.9254	.5349-02	.3921-02	.8230	5.829	540.9
292	247.00	.90000	793.00	.5530-01	.6700-01	.7480-01	.9254	.3802-02	.2810-02	.6030	3.913	536.0
281	247.00	.92600	2144.0	.3350-01	.4080-01	.4580-01	.9254	.2327-02	.1702-02	.3550	2.488	541.1
281	247.00	.93000	2149.0	.4130-01	.5060-01	.5690-01	.9254	.2892-02	.2098-02	.4280	3.091	545.5
281	250.57	.92600	2143.0	.3400-01	.4150-01	.4660-01	.9253	.2367-02	.1730-02	.3600	2.522	541.5
281	250.57	.93000	2148.0	.4190-01	.5140-01	.5790-01	.9253	.2942-02	.2129-02	.4310	3.044	546.9
292	258.00	.27000	794.00	.5960-01	.7350-01	.8310-01	.9251	.4224-02	.3032-02	.6040	4.296	551.6
292	258.00	.29000	795.00	.5700-01	.6960-01	.7820-01	.9251	.3979-02	.2899-02	.6000	3.706	543.6
292	258.00	.30000	796.00	.7970-01	.9770-01	.1101	.9251	.5598-02	.4055-02	.8260	5.010	546.9
279	258.00	.32000	798.00	.8470-01	.1047	.1187	.9251	.6028-02	.4304-02	.8430	5.070	552.5
279	258.00	.34000	802.00	.8180-01	.1006	.1135	.9251	.5767-02	.4157-02	.8340	5.040	547.8
279	258.00	.34500	803.00	.8240-01	.1013	.1142	.9251	.5803-02	.4187-02	.8430	5.107	547.2
279	258.00	.35500	805.00	.8080-01	.9930-01	.1120	.9251	.5691-02	.4102-02	.8230	4.989	547.7
279	258.00	.36000	806.00	.7780-01	.9550-01	.1076	.9251	.5464-02	.3954-02	.8020	4.877	545.7
279	258.00	.36500	807.00	.7870-01	.9650-01	.1087	.9251	.5523-02	.4000-02	.8130	4.961	545.2
279	258.00	.37000	808.00	.7980-01	.9780-01	.1102	.9251	.5597-02	.4055-02	.8250	5.046	545.0
279	258.00	.37500	809.00	.7860-01	.9630-01	.1084	.9251	.5506-02	.3993-02	.8140	4.981	544.6
279	258.00	.38000	810.00	.7810-01	.9560-01	.1077	.9251	.5472-02	.3965-02	.8070	4.964	545.0
292	258.00	.40000	812.00	.8140-01	.9890-01	.1107	.9251	.5631-02	.4140-02	.8790	5.440	538.4
281	258.00	.93500	2151.0	.4920-01	.6040-01	.6800-01	.9251	.3460-02	.2501-02	.5070	3.578	546.8
292	270.00	.40000-01	985.00	.3544	.4526	.3986	.9745	.2027-01	.1802-01	3.117	19.96	577.8
292	270.00	.50000-01	986.00	.4147	.5330	.4765	.9708	.2423-01	.2109-01	3.565	22.66	581.7
292	270.00	.60000-01	987.00	.4013	.5104	.4668	.9672	.2374-01	.2041-01	3.582	23.24	575.2
292	270.00	.70000-01	988.00	.3687	.4696	.4369	.9637	.2222-01	.1875-01	3.275	21.69	576.0
292	270.00	.80000-01	989.00	.3399	.4303	.4080	.9603	.2075-01	.1729-01	3.089	21.61	572.1
292	270.00	.10000+00	990.00	.3042	.3771	.3702	.9539	.1883-01	.1547-01	3.000	19.48	556.8
292	270.00	.15000	991.00	.1946	.2372	.2479	.9401	.1261-01	.9895-02	2.068	15.23	541.7
292	270.00	.20000	992.00	.1184	.1416	.1537	.9299	.7818-02	.6021-02	1.378	9.441	521.8
292	270.00	.23000	813.00	.8630-01	.1056	.1184	.9257	.6022-02	.4387-02	.9010	6.554	545.4
292	270.00	.24000	814.00	.6930-01	.8510-01	.9630-01	.9246	.4897-02	.3525-02	.7120	5.754	548.8
292	270.00	.25000	815.00	.4530-01	.5520-01	.6220-01	.9246	.3162-02	.2302-02	.4790	3.785	542.7

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT46)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
292	270.00	.27000	816.00	.5110-01	.6270-01	.7090-01	.9246	.3605-02	.2601-02	.5280	3.751	547.7
292	270.00	.29000	817.00	.6190-01	.7530-01	.8460-01	.9246	.4300-02	.3149-02	.6660	4.152	539.4
292	270.00	.30000	818.00	.8000-01	.9720-01	.1091	.9246	.5547-02	.4067-02	.8620	5.293	538.7
292	270.00	.31000	819.00	.8170-01	.9920-01	.1113	.9246	.5657-02	.4157-02	.8870	5.402	537.4
292	270.00	.32000	820.00	.8280-01	.1002	.1122	.9246	.5706-02	.4210-02	.9090	5.527	534.9
292	270.00	.32500	821.00	.8210-01	.9940-01	.1113	.9246	.5661-02	.4175-02	.9000	5.460	535.1
292	270.00	.33000	822.00	.7910-01	.9560-01	.1069	.9246	.5436-02	.4022-02	.8750	5.326	533.2
292	270.00	.33500	823.00	.7820-01	.9450-01	.1056	.9246	.5368-02	.3977-02	.8690	5.304	532.4
292	270.00	.34500	825.00	.7630-01	.9200-01	.1027	.9246	.5223-02	.3880-02	.8530	5.200	530.8
292	270.00	.36000	828.00	.7590-01	.9160-01	.1023	.9246	.5202-02	.3858-02	.8450	5.132	531.8
292	270.00	.36500	829.00	.8180-01	.9870-01	.1104	.9246	.5612-02	.4158-02	.9080	5.529	532.4
292	270.00	.37000	830.00	.7430-01	.9020-01	.1012	.9246	.5145-02	.3777-02	.8040	4.893	538.0
292	270.00	.37500	R31.00	.7730-01	.9380-01	.1052	.9246	.5350-02	.3932-02	.8390	5.137	537.4
292	270.00	.38000	832.00	.7480-01	.9080-01	.1019	.9246	.5181-02	.3805-02	.8100	4.962	537.8
292	270.00	.39000	833.00	.7630-01	.9260-01	.1039	.9246	.5282-02	.3883-02	.8290	5.132	537.3
292	270.00	.40000	834.00	.7620-01	.9240-01	.1037	.9246	.5271-02	.3874-02	.8270	5.134	537.3
292	270.00	.50000	835.00	.7550-01	.9300-01	.1053	.9246	.5355-02	.3840-02	.7680	4.844	550.8
292	270.00	.60000	836.00	.7580-01	.9250-01	.1041	.9246	.5294-02	.3855-02	.8020	5.356	542.6
292	270.00	.70000	837.00	.7380-01	.9020-01	.1016	.9246	.5168-02	.3755-02	.7770	5.479	543.8
292	270.00	.80000	838.00	.7530-01	.9130-01	.1023	.9246	.5201-02	.3829-02	.8210	5.132	536.2
292	270.00	.90000	839.00	.4620-01	.5590-01	.6260-01	.9246	.3183-02	.2349-02	.5070	3.264	534.7
281	270.00	.92600	2141.0	.3540-01	.4330-01	.4880-01	.9246	.2484-02	.1802-02	.3710	2.544	543.5
281	270.00	.93000	2146.0	.4250-01	.5220-01	.5900-01	.9246	.2999-02	.2163-02	.4380	3.095	546.8
281	270.00	.93500	2150.0	.4660-01	.5700-01	.6430-01	.9246	.3272-02	.2368-02	.4840	3.423	544.9
281	289.43	.92600	2140.0	.2910-01	.3530-01	.3980-01	.9235	.2023-02	.1480-02	.3160	2.223	535.9
281	289.43	.93000	2145.0	.3540-01	.4310-01	.4880-01	.9235	.2481-02	.1801-02	.3770	2.695	540.2
292	292.50	.23000	840.00	.6790-01	.8280-01	.9340-01	.9242	.4748-02	.3453-02	.7210	5.825	541.9
292	292.50	.25000	841.00	.3460-01	.4200-01	.4740-01	.9234	.2410-02	.1758-02	.3740	2.914	537.9
292	292.50	.30000	843.00	.6990-01	.8510-01	.9620-01	.9234	.4890-02	.3557-02	.7510	4.481	539.7
292	292.50	.35000	845.00	.5240-01	.6340-01	.7140-01	.9234	.3631-02	.2664-02	.5750	3.546	534.8
292	292.50	.37000	846.00	.6490-01	.7830-01	.8800-01	.9234	.4475-02	.3301-02	.7240	4.498	531.4
292	292.50	.40000	847.00	.6290-01	.7580-01	.8510-01	.9234	.4329-02	.3197-02	.7040	4.420	530.7
292	292.50	.45000	848.00	.6250-01	.7550-01	.8490-01	.9234	.4317-02	.3178-02	.6930	4.385	532.7
292	292.50	.50000	849.00	.6120-01	.7460-01	.8440-01	.9234	.4291-02	.3111-02	.6510	4.198	541.5
292	292.50	.60000	851.00	.6040-01	.7330-01	.8260-01	.9234	.4202-02	.3072-02	.6570	4.428	536.7
292	292.50	.65000	852.00	.6020-01	.7290-01	.8210-01	.9234	.4177-02	.3064-02	.6610	4.528	534.8
292	292.50	.70000	853.00	.5590-01	.6810-01	.7690-01	9234	.3912-02	.2845-02	.6000	4.227	539.8
292	292.50	.75000	854.00	.4280-01	.5180-01	.5830-01	.9234	.2963-02	.2177-02	.4720	3.082	533.9
292	292.50	.80000	855.00	.5030-01	.6080-01	.6840-01	.9234	.3476-02	.2560-02	.5590	3.660	532.5
281	292.50	.82000	2129.0	.5220-01	.6330-01	.7140-01	.9234	.3630-02	.2654-02	.5670	3.493	535.8
281	292.50	.83000	2130.0	.5230-01	.6360-01	.7170-01	.9234	.3647-02	.2662-02	.5650	3.512	536.9
281	292.50	.85000	2132.0	.5430-01	.6590-01	.7430-01	.9234	.3779-02	.2760-02	.5880	3.672	536.4
281	292.50	.86000	2133.0	.5700-01	.6920-01	.7810-01	.9234	.3970-02	.2899-02	.6170	3.832	536.6

IH72, EXTERNAL TANK CLEAN, HU/HREF

(RVZT46)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
281	292.50	.87000	2134.0	.5770-01	.7010-01	.7910-01	.9234	.4023-02	.2935-02	.6230	3.893	537.0
281	292.50	.88000	2135.0	.5330-01	.6470-01	.7310-01	.9234	.3717-02	.2710-02	.5740	3.587	537.4
281	292.50	.89000	2136.0	.5250-01	.6380-01	.7200-01	.9234	.3663-02	.2670-02	.5650	3.538	537.7
292	292.50	.90000	856.00	.3660-01	.4400-01	.4930-01	.9234	.2505-02	.1860-02	.4160	2.722	527.3
281	292.50	.92600	2138.0	.2710-01	.3280-01	.3690-01	.9234	.1878-02	.1377-02	.2960	2.087	534.1
281	292.50	.93000	2139.0	.3320-01	.4030-01	.4550-01	.9234	.2314-02	.1689-02	.3590	2.593	536.6
281	301.50	.82000	2116.0	.4400-01	.5310-01	.5990-01	.9229	.3045-02	.2236-02	.4870	3.005	531.8
281	301.50	.83000	2117.0	.4470-01	.5400-01	.6080-01	.9229	.3093-02	.2273-02	.4950	3.044	531.3
281	301.50	.83500	2118.0	.4530-01	.5470-01	.6160-01	.9229	.3132-02	.2303-02	.5030	3.063	531.0
281	301.50	.84000	2119.0	.4370-01	.5270-01	.5940-01	.9229	.3020-02	.2220-02	.4840	2.976	531.2
281	301.50	.85000	2120.0	.4480-01	.5400-01	.6090-01	.9229	.3095-02	.2277-02	.4980	3.069	530.6
281	301.50	.86000	2021.0	.4230-01	.5110-01	.5760-01	.9229	.2927-02	.2151-02	.4690	2.908	531.2
281	301.50	.87000	2122.0	.4680-01	.5650-01	.6370-01	.9229	.3241-02	.2380-02	.5180	3.198	531.7
281	301.50	.88000	2123.0	.4440-01	.5360-01	.6050-01	.9229	.3077-02	.2257-02	.4900	3.040	532.4
281	301.50	.89000	2124.0	.4460-01	.5390-01	.6070-01	.9229	.3089-02	.2268-02	.4940	3.091	531.8
281	301.50	.90000	2125.0	.3030-01	.3650-01	.4110-01	.9229	.2088-02	.1539-02	.3390	2.140	529.4
281	301.50	.92600	2127.0	.2910-01	.3510-01	.3950-01	.9229	.2009-02	.1480-02	.3250	2.054	529.8
281	301.50	.93500	2128.0	.3640-01	.4390-01	.4950-01	.9229	.2517-02	.1851-02	.4040	2.747	531.0
281	305.40	.82000	2113.0	.4190-01	.5060-01	.5700-01	.9227	.2897-02	.2131-02	.4670	2.871	530.2
281	305.40	.83000	2114.0	.4290-01	.5170-01	.5820-01	.9227	.2960-02	.2180-02	.4800	2.949	529.4
281	305.40	.83500	2115.0	.4230-01	.5100-01	.5740-01	.9227	.2920-02	.2149-02	.4720	2.924	529.9
292	305.40	.84000	857.00	.4200-01	.5040-01	.5660-01	.9227	.2876-02	.2136-02	.4820	3.009	525.2
279	305.40	.86000	859.00	.4270-01	.5160-01	.5830-01	.9227	.2962-02	.2168-02	.4680	2.956	532.5
279	305.40	.87000	860.00	.4280-01	.5180-01	.5860-01	.9227	.2979-02	.2174-02	.4650	2.944	534.3
279	305.40	.88000	861.00	.4400-01	.5330-01	.6030-01	.9227	.3062-02	.2237-02	.4810	3.041	533.6
279	305.40	.89000	862.00	.4140-01	.5020-01	.5670-01	.9227	.2882-02	.2106-02	.4520	2.877	533.7
279	305.40	.90000	863.00	.3600-01	.4350-01	.4910-01	.9227	.2496-02	.1828-02	.3950	2.528	532.4
279	305.40	.91000	864.00	.2170-01	.2620-01	.2940-01	.9227	.1496-02	.1104-02	.2440	1.792	527.4
279	305.40	.92600	865.00	.2390-01	.2880-01	.3250-01	.9227	.1653-02	.1213-02	.2630	1.923	531.3
279	309.30	.81000	867.00	.3690-01	.4460-01	.5040-01	.9225	.2560-02	.1873-02	.4050	2.551	532.2
279	309.30	.83000	869.00	.3000-01	.3630-01	.4100-01	.9225	.2081-02	.1526-02	.3320	2.098	530.9
279	315.00	.50000-01	871.00	.3571	.4585	.4353	.9594	.2211-01	.1814-01	3.069	19.31	579.2
279	315.00	.60000-01	872.00	.3160	.4019	.3893	.9560	.1977-01	.1605-01	2.811	18.42	573.4
292	315.00	.70000-01	873.00	.2982	.3738	.3687	.9527	.1875-01	.1517-01	2.817	18.99	565.0
292	315.00	.80000-01	874.00	.2576	.3198	.3203	.9496	.1629-01	.1310-01	2.529	17.77	557.6
292	315.00	.10000+00	875.00	.2294	.2817	.2897	.9439	.1473-01	.1167-01	2.359	15.47	548.5
292	315.00	.15000	876.00	.1393	.1690	.1828	.9324	.9295-02	.7083-02	1.510	11.10	537.5
292	315.00	.20000	877.00	.8020-01	.9600-01	.1065	.9250	.5415-02	.4078-02	.9300	6.344	522.8
292	315.00	.35000	878.00	.5540-01	.6650-01	.7480-01	.9223	.3803-02	.2819-02	.6350	3.991	525.3
292	315.00	.40000	879.00	.5000-01	.5990-01	.6730-01	.9223	.3423-02	.2542-02	.5760	3.693	524.1
292	315.00	.50000	880.00	.3940-01	.4760-01	.5370-01	.9223	.2731-02	.2005-02	.4400	3.044	531.3
292	315.00	.55000	881.00	.3080-01	.3710-01	.4180-01	.9223	.2127-02	.1568-02	.3480	2.342	528.6
292	315.00	.60000	882.00	.4080-01	.4900-01	.5520-01	.9223	.2807-02	.2074-02	.4630	3.146	527.3

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT46)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
292	315.00	.65000	883.00	.4330-01	.5200-01	.5860-01	.9223	.2978-02	.2204-02	.4940	3.408	526.4
292	315.00	.70000	884.00	.3690-01	.4430-01	.5000-01	.9223	.2540-02	.1875-02	.4180	3.001	527.8
292	315.00	.75000	885.00	.2880-01	.3450-01	.3880-01	.9223	.1971-02	.1464-02	.3320	2.116	524.0
292	315.00	.80000	886.00	.3550-01	.4250-01	.4770-01	.9223	.2423-02	.1806-02	.4140	2.634	521.6
292	315.00	.84000	887.00	.3450-01	.4120-01	.4620-01	.9223	.2350-02	.1754-02	.4040	2.573	520.5
279	315.00	.85000	888.00	.3350-01	.4040-01	.4550-01	.9223	.2312-02	.1702-02	.3750	2.398	528.2
279	315.00	.87000	890.00	.3350-01	.4040-01	.4560-01	.9223	.2316-02	.1704-02	.3750	2.406	528.4
279	315.00	.88000	891.00	.3030-01	.3650-01	.4120-01	.9223	.2095-02	.1538-02	.3370	2.170	529.7
279	315.00	.89000	892.00	.3240-01	.3910-01	.4410-01	.9223	.2240-02	.1645-02	.3600	2.361	529.7
279	315.00	.90000	893.00	.2480-01	.2990-01	.3380-01	.9223	.1715-02	.1258-02	.2750	1.824	530.0
279	315.00	.91000	894.00	.1400-01	.1680-01	.1890-01	.9223	.9585-03	.7111-03	.1600	1.183	523.1
279	315.00	.92600	895.00	.2040-01	.2460-01	.2780-01	.9223	.1410-02	.1036-02	.2270	1.667	529.1
279	322.30	.42000	897.00	.3990-01	.4810-01	.5430-01	.9221	.2761-02	.2029-02	.4470	2.899	528.3
279	322.30	.43500	898.00	.4520-01	.5450-01	.6150-01	.9221	.3125-02	.2298-02	.5070	3.198	527.9
279	322.30	.45000	899.00	.4030-01	.4860-01	.5500-01	.9221	.2793-02	.2049-02	.4490	2.963	529.4
279	322.30	.50000	900.00	.3770-01	.4570-01	.5190-01	.9221	.2638-02	.1913-02	.4060	2.715	536.4
279	322.30	.60000	901.00	.3570-01	.4300-01	.4860-01	.9221	.2468-02	.1813-02	.3980	2.667	528.9
279	322.30	.70000	902.00	.3440-01	.4150-01	.4700-01	.9221	.2386-02	.1746-02	.3800	2.611	531.1
281	324.45	.41000	2110.0	.4100-01	.4920-01	.5550-01	.9221	.2820-02	.2086-02	.4680	2.986	524.8
281	324.45	.92600	2164.0	.1540-01	.1840-01	.2070-01	.9221	.1050-02	.7817-03	.1780	1.285	521.0
281	326.85	.40000	2107.0	.3300-02	.4000-02	.4500-02	.9220	.2281-03	.1663-03	.3600-01	.2280	533.4
281	326.85	.40500	2108.0	.4180-01	.5010-01	.5640-01	.9220	.2866-02	.2126-02	.4810	3.070	523.0
280	326.85	.44000	2021.0	.3940-01	.4740-01	.5350-01	.9220	.2719-02	.2004-02	.4460	2.861	527.3
280	326.85	.54600	2024.0	.1430-01	.1710-01	.1930-01	.9220	.9815-03	.7249-03	.1620	1.097	526.1
280	326.85	.58100	2025.0	.3060-01	.3690-01	.4180-01	.9220	.2122-02	.1554-02	.3400	2.394	531.2
280	326.85	.61600	2026.0	.3090-01	.3710-01	.4190-01	.9220	.2129-02	.1568-02	.3480	2.443	527.7
280	326.85	.65200	2027.0	.3130-01	.3760-01	.4230-01	.9220	.2152-02	.1588-02	.3550	2.491	526.4
280	326.85	.68600	2028.0	.2810-01	.3380-01	.3810-01	.9220	.1936-02	.1426-02	.3170	2.246	527.4
280	326.85	.72260	2029.0	.1720-01	.2070-01	.2330-01	.9220	.1186-02	.8763-03	.1960	1.384	525.7
280	326.85	.75790	2030.0	.1440-01	.1730-01	.1950-01	.9220	.9896-03	.7338-03	.1660	1.074	523.5
280	326.85	.79310	2031.0	.2840-01	.3410-01	.3850-01	.9220	.1956-02	.1441-02	.3200	2.025	527.6
280	326.85	.82830	2032.0	.2640-01	.3180-01	.3580-01	.9220	.1820-02	.1344-02	.3000	1.918	526.2
280	326.85	.86350	2033.0	.2710-01	.3250-01	.3670-01	.9220	.1865-02	.1377-02	.3090	1.948	526.2
280	326.85	.90000	2034.0	.3180-01	.3820-01	.4300-01	.9220	.2188-02	.1615-02	.3610	2.265	526.3
281	326.85	.92600	2163.0	.1500-01	.1790-01	.2010-01	.9220	.1024-02	.7621-03	.1740	1.255	520.7
280	326.85	.93390	2035.0	.3210-01	.3870-01	.4380-01	.9220	.2225-02	.1632-02	.3580	2.417	530.4
281	330.20	.40000	2104.0	.4340-01	.5200-01	.5850-01	.9220	.2977-02	.2208-02	.5000	3.188	523.0
281	330.20	.40500	2105.0	.4110-01	.4920-01	.5530-01	.9220	.2813-02	.2090-02	.4760	3.035	521.9
281	330.20	.41000	2106.0	.3940-01	.4720-01	.5300-01	.9220	.2696-02	.2002-02	.4550	2.895	522.2
279	330.20	.42000	905.00	.3760-01	.4510-01	.5070-01	.9220	.2578-02	.1908-02	.4280	2.796	523.8
279	330.20	.43500	906.00	.3440-01	.4130-01	.4650-01	.9220	.2362-02	.1745-02	.3900	2.556	525.1
279	330.20	.45000	907.00	.3460-01	.4170-01	.4700-01	.9220	.2387-02	.1760-02	.3910	2.578	526.3
279	330.20	.50000	908.00	.2990-01	.3620-01	.4100-01	.9220	.2081-02	.1518-02	.3280	2.360	532.7

IH72, EXTERNAL TANK CLEAN, HU/HREF

(RVZT46)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
279	330.20	.60000	909.00	.3220-01	.3870-01	.4370-01	.9220	.2220-02	.1635-02	.3620	2.395	526.8
279	330.20	.70000	910.00	.2780-01	.3350-01	.3780-01	.9220	.1920-02	.1411-02	.3110	2.115	528.2
279	330.20	.80000	911.00	.2080-01	.2510-01	.2830-01	.9220	.1438-02	.1059-02	.2340	1.517	527.2
279	330.20	.87000	912.00	.4900-02	.5900-02	.6700-02	.9220	.3399-03	.2487-03	.5400-01	.3490	530.8
281	330.20	.92600	2162.0	.1530-01	.1830-01	.2050-01	.9220	.1043-02	.7766-03	.1780	1.278	520.2
281	334.98	.92600	2161.0	.2380-01	.2850-01	.3200-01	.9220	.1627-02	.1212-02	.2780	1.987	520.4
279	334.98	.93500	913.00	.3910-01	.4720-01	.5330-01	.9220	.2706-02	.1988-02	.4370	3.207	528.6
279	334.98	.94500	914.00	.2730-01	.3280-01	.3700-01	.9220	.1881-02	.1387-02	.3080	2.244	526.1
279	337.50	.40000-01	915.00	.3281	.4193	.4054	.9562	.2059-01	.1667-01	2.867	17.90	576.5
279	337.50	.50000-01	916.00	.3260	.4139	.4077	.9528	.2071-01	.1656-01	2.919	18.59	572.2
279	337.50	.70000-01	918.00	.1313	.1564	.1586	.9465	.8055-02	.6671-02	1.555	10.98	515.4
279	337.50	.80000-01	919.00	.2304	.2849	.2937	.9436	.1492-01	.1170-01	2.288	15.57	552.9
279	337.50	.10000+00	920.00	.1838	.2242	.2362	.9384	.1200-01	.9339-02	1.941	13.01	540.6
279	337.50	.15000	921.00	.9930-01	.1199	.1316	.9285	.6685-02	.5045-02	1.101	8.043	530.3
279	337.50	.20000	922.00	.5720-01	.6850-01	.7670-01	.9231	.3894-02	.2908-02	.6610	4.462	521.1
279	337.50	.42000	923.00	.3100-01	.3720-01	.4180-01	.9220	.2126-02	.1577-02	.3570	2.357	522.3
281	337.50	.42500	2167.0	.3220-01	.3850-01	.4330-01	.9220	.2200-02	.1639-02	.3760	2.456	520.1
279	337.50	.43500	924.00	.3370-01	.4050-01	.4560-01	.9220	.2314-02	.1713-02	.3850	2.552	523.5
279	337.50	.85000	926.00	.1940-01	.2320-01	.2600-01	.9220	.1322-02	.9833-03	.2240	1.470	520.4
279	337.50	.86000	927.00	.2060-01	.2470-01	.2770-01	.9220	.1407-02	.1047-02	.2380	1.567	520.6
279	337.50	.87000	928.00	.2230-01	.2660-01	.2990-01	.9220	.1521-02	.1131-02	.2570	1.693	521.2
279	337.50	.88000	929.00	.1660-01	.1950-01	.2170-01	.9220	.1103-02	.8409-03	.2070	1.383	502.6
279	337.50	.89000	930.00	.2300-01	.2760-01	.3120-01	.9220	.1584-02	.1168-02	.2600	1.727	526.1
279	337.50	.90000	931.00	.1960-01	.2350-01	.2650-01	.9220	.1346-02	.9937-03	.2220	1.512	525.2
279	337.50	.91000	932.00	.1470-01	.1760-01	.1980-01	.9220	.1007-02	.7485-03	.1700	1.263	520.9
292	337.50	.92600	933.00	.2880-01	.3420-01	.3820-01	.9220	.1942-02	.1464-02	.3490	2.588	512.6
292	343.12	.41500	934.00	.3180-01	.3780-01	.4230-01	.9220	.2150-02	.1618-02	.3830	2.528	513.9
292	343.12	.42000	935.00	.3030-01	.3600-01	.4030-01	.9220	.2049-02	.1541-02	.3640	2.422	514.5
292	343.12	.42500	936.00	.2780-01	.3300-01	.3690-01	.9220	.1876-02	.1413-02	.3360	2.240	513.3
292	343.12	.44500	939.00	.2690-01	.3200-01	.3570-01	.9220	.1818-02	.1368-02	.3230	2.184	514.2
292	343.12	.45000	940.00	.2660-01	.3160-01	.3540-01	.9220	.1799-02	.1354-02	.3210	2.165	513.9
292	343.12	.50000	941.00	.2440-01	.2920-01	.3270-01	.9220	.1663-02	.1243-02	.2880	1.984	518.8
292	343.12	.60000	942.00	.2490-01	.2970-01	.3320-01	.9220	.1690-02	.1267-02	.2970	1.945	516.4
292	343.12	.80000	944.00	.1750-01	.2080-01	.2320-01	.9220	.1181-02	.8882-03	.2100	1.393	514.3
281	345.56	.42500	2168.0	.2740-01	.3270-01	.3660-01	.9220	.1862-02	.1392-02	.3220	2.109	517.8
281	345.56	.92600	2160.0	.3080-01	.3680-01	.4130-01	.9220	.2099-02	.1567-02	.3610	2.589	518.7
292	348.00	.35000	945.00	.3130-01	.3720-01	.4160-01	.9220	.2116-02	.1592-02	.3760	2.424	514.4
292	348.00	.36000	946.00	.3100-01	.3680-01	.4120-01	.9220	.2095-02	.1576-02	.3730	2.408	514.3
292	348.00	.37000	947.00	.2920-01	.3470-01	.3880-01	.9220	.1973-02	.1487-02	.3530	2.292	513.1
279	348.00	.37500	948.00	.2900-01	.3470-01	.3900-01	.9220	.1982-02	.1474-02	.3350	2.166	520.9
279	348.00	.38000	949.00	.2940-01	.3520-01	.3950-01	.9220	.2008-02	.1493-02	.3400	2.216	520.7
279	348.00	.38500	950.00	.2950-01	.3530-01	.3960-01	.9220	.2013-02	.1498-02	.3410	2.231	520.5
279	348.00	.39000	951.00	.2680-01	.3200-01	.3600-01	.9220	.1828-02	.1360-02	.3100	2.038	520.5

IH72, EXTERNAL TANK CLEAN, HU/HREF (RVZT46)

RUN NUMBER	PHI	X/LT	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
279	348.00	.39500	952.00	.2950-01	.3530-01	.3970-01	.9220	.2016-02	.1500-02	.3420	2.215	520.5
279	348.00	.40000	953.00	.2890-01	.3450-01	.3880-01	.9220	.1971-02	.1467-02	.3350	2.211	519.9
279	348.00	.40500	954.00	.2040-01	.2450-01	.2770-01	.9220	.1407-02	.1034-02	.2280	1.500	528.2
279	348.00	.41000	955.00	.2890-01	.3460-01	.3890-01	.9220	.1974-02	.1470-02	.3350	2.219	520.2
279	348.00	.42000	957.00	.2870-01	.3430-01	.3850-01	.9220	.1956-02	.1456-02	.3320	2.210	520.2
279	348.00	.42500	958.00	.2850-01	.3420-01	.3840-01	.9220	.1950-02	.1450-02	.3300	2.192	521.0
279	348.00	.43000	959.00	.2550-01	.3040-01	.3420-01	.9220	.1736-02	.1293-02	.2960	1.963	519.6
279	348.00	.44000	960.00	.2090-01	.2490-01	.2800-01	.9220	.1420-02	.1060-02	.2430	1.621	518.6
279	348.00	.44500	961.00	.2560-01	.3060-01	.3440-01	.9220	.1745-02	.1300-02	.2970	1.978	519.8
279	348.00	.85000	968.00	.1680-01	.2010-01	.2250-01	.9220	.1144-02	.8535-03	.1960	1.290	518.7
279	348.00	.86000	969.00	.1750-01	.2090-01	.2350-01	.9220	.1195-02	.8888-03	.2020	1.333	520.9
280	348.00	.89000	972.00	.3350-01	.4030-01	.4540-01	.9220	.2310-02	.1704-02	.3800	2.551	526.5
280	348.00	.91000	974.00	.1870-01	.2230-01	.2510-01	.9220	.1274-02	.9504-03	.2190	1.617	519.6
281	352.20	.93700	2089.0	.3900-01	.4770-01	.5460-01	.9220	.2774-02	.1983-02	.4060	2.844	544.5
281	354.00	.42500	2169.0	.2580-01	.3080-01	.3440-01	.9220	.1752-02	.1313-02	.3070	2.010	515.8
281	354.00	.43000	2174.0	.2680-01	.3190-01	.3570-01	.9220	.1817-02	.1362-02	.3180	2.080	516.2
281	354.00	.43500	2177.0	.2560-01	.3050-01	.3420-01	.9220	.1738-02	.1304-02	.3050	2.001	515.3
281	354.00	.44000	2179.0	.2460-01	.2930-01	.3280-01	.9220	.1667-02	.1249-02	.2910	1.909	516.1
281	355.16	.92600	2158.0	.2490-01	.2980-01	.3340-01	.9220	.1699-02	.1265-02	.2890	2.104	520.6

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = -5.000 BETA = -5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
128	-5.070	-5.100	3.010	37.20	706.0	250.9	.9980	6.330	2336.	.3337-03	.2007-06	3.885

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
128	.5553-01	.9199-02

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
128	1.0000	1444.0	.28930	.4302	.5068	.9345	.2814-01	.1606-01	1.730	12.72	597.9
128	1.0000	1445.0	.27740	.4205	.5006	.9345	.2780-01	.1540-01	1.597	11.72	602.0
128	2.0000	1446.0	.28970	.4401	.5245	.9345	.2913-01	.1608-01	1.660	12.39	602.4
128	2.0000	1461.0	.12120	.6175	-2.294	.9345	-.1274	.6731-02	.2950	3.655	661.7
128	2.0000	1448.0	.20790	.3220	.3880	.9345	.2155-01	.1154-01	1.149	8.413	606.1
128	3.0000	1449.0	.31410	.4733	.5615	.9345	.3118-01	.1744-01	1.830	13.43	600.7
128	3.0000	1450.0	.29010	.4943	.6323	.9345	.3511-01	.1611-01	1.376	10.25	620.2
128	3.0000	1451.0	.30030	.5183	.6687	.9345	.3713-01	.1668-01	1.399	10.41	621.7
128	3.0000	1452.0	.27730	.4629	.5841	.9345	.3243-01	.1540-01	1.355	10.03	617.6
128	3.0000	1453.0	.27310	.4168	.4980	.9345	.2765-01	.1517-01	1.552	11.30	603.3
128	4.0000	1454.0	.29850	.4471	.5286	.9345	.2935-01	.1658-01	1.760	12.93	599.4
128	4.0000	1459.0	.11360	.1761	.2123	.9345	.1179-01	.6309-02	.6270	7.972	606.2
128	4.0000	1455.0	.25460	.4298	.5462	.9345	.3033-01	.1414-01	1.224	9.124	619.0
128	4.0000	1460.0	.17230	.3902	.6418	.9345	.3564-01	.9569-02	.6050	7.128	642.4
128	4.0000	1456.0	.28420	.4380	.5263	.9345	.2923-01	.1578-01	1.585	11.42	605.2
128	5.0000	1457.0	.26450	.3896	.4566	.9345	.2536-01	.1469-01	1.613	12.08	595.8
128	5.0000	1458.0	.27660	.4135	.4886	.9345	.2713-01	.1536-01	1.636	12.02	599.1

IH72, OTS DIRTY,RGT SRB FWD SEPART MOTOR HI/HREF (RVZM02)

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = -5.000 BETA = .0000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
124	-5.060	.0000	3.010	37.30	706.0	250.9	.9990	6.336	2336.	.3340-03	.2007-06	3.888

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
124	.5556-01	.9195-02

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
124	1.0000	1444.0	.30390	.4567	.5410	.9345	.3006-01	.1688-01	1.780	13.07	600.2
124	1.0000	1445.0	.29730	.4557	.5459	.9345	.3033-01	.1652-01	1.676	12.29	604.1
124	2.0000	1446.0	.30170	.4616	.5524	.9345	.3069-01	.1676-01	1.707	12.73	603.8
124	2.0000	1461.0	.10980	.5491	-2.286	.9345	-.1270	.6101-02	.2690	3.328	661.5
124	2.0000	1448.0	.25300	.3928	.4740	.9345	.2633-01	.1406-01	1.394	10.20	606.5
124	3.0000	1449.0	.32400	.4918	.5859	.9345	.3255-01	.1800-01	1.861	13.65	602.3
124	3.0000	1450.0	.30510	.5295	.6860	.9345	.3811-01	.1695-01	1.411	10.50	622.4
124	3.0000	1451.0	.32880	.5718	.7417	.9345	.4121-01	.1827-01	1.517	11.29	622.6
124	3.0000	1452.0	.31380	.5212	.6555	.9345	.3642-01	.1743-01	1.546	11.45	617.0
124	3.0000	1453.0	.29220	.4427	.5268	.9345	.2927-01	.1623-01	1.685	12.28	601.9
124	4.0000	1454.0	.31450	.4722	.5592	.9345	.3107-01	.1747-01	1.845	13.55	600.0
124	4.0000	1459.0	.11230	.1735	.2089	.9345	.1160-01	.6238-02	.6230	7.924	605.7
124	4.0000	1455.0	.28960	.4913	.6266	.9345	.3481-01	.1609-01	1.383	10.30	619.7
124	4.0000	1460.0	.17490	.4188	.7377	.9345	.4098-01	.9716-02	.5890	6.932	645.1
124	4.0000	1456.0	.28190	.4332	.5197	.9345	.2887-01	.1566-01	1.582	11.39	604.7
124	5.0000	1457.0	.28970	.4271	.5007	.9345	.2782-01	.1609-01	1.765	13.21	596.0
124	5.0000	1458.0	.28480	.4237	.4991	.9345	.2773-01	.1582-01	1.703	12.52	598.0

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = -5.000 BETA = 5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
126	-5.080	5.100	3.010	37.30	706.0	250.9	.9990	6.336	2336.	.3341-03	.2007-06	3.888

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
126	.5556-01	.9195-02

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
126	1.0000	1444.0	.32860	.5254	.6451	.9345	.3584-01	.1826-01	1.720	12.56	611.4
126	1.0000	1445.0	.33290	.5425	.6741	.9345	.3745-01	.1850-01	1.689	12.32	614.3
126	2.0000	1446.0	.31550	.5155	.6415	.9345	.3564-01	.1753-01	1.594	11.82	614.7
126	2.0000	1448.0	.25940	.4424	.5662	.9345	.3146-01	.1441-01	1.230	8.941	620.3
126	3.0000	1449.0	.34460	.5563	.6873	.9345	.3818-01	.1914-01	1.774	12.95	612.9
126	3.0000	1450.0	.28990	.5495	.7608	.9345	.4227-01	.1610-01	1.202	8.910	630.9
126	3.0000	1451.0	.31680	.6025	.8363	.9345	.4646-01	.1760-01	1.309	9.701	631.2
126	3.0000	1452.0	.29820	.5405	.7224	.9345	.4013-01	.1657-01	1.304	9.615	626.9
126	3.0000	1453.0	.30210	.4921	.6112	.9345	.3396-01	.1678-01	1.534	11.11	614.2
126	4.0000	1454.0	.32140	.5075	.6185	.9345	.3436-01	.1786-01	1.718	12.56	609.4
126	4.0000	1459.0	.10930	.1757	.2165	.9345	.1203-01	.6072-02	.5670	7.181	612.3
126	4.0000	1455.0	.25130	.4577	.6140	.9345	.3411-01	.1396-01	1.092	8.109	627.4
126	4.0000	1460.0	.18320	.5265	1.256	.9345	.6975-01	.1018-01	.5510	6.467	651.5
126	4.0000	1456.0	.28780	.4718	.5885	.9345	.3269-01	.1599-01	1.446	10.36	615.2
126	5.0000	1457.0	.29130	.4500	.5415	.9345	.3009-01	.1618-01	1.619	12.06	605.6
126	5.0000	1458.0	.30600	.4810	.5846	.9345	.3248-01	.1700-01	1.649	12.06	608.6

IH72, OTS DIRTY,RGT SRB FWD SEPART MOTOR HI/HREF (RVZM04)

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = .0000 BETA = -5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
116	.0000	-5.000	3.010	37.30	704.0	250.5	1.000	6.340	2334.	.3349-03	.2004-06	3.901

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
116	.5556-01	.9182-02

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
116	1.0000	1444.0	.20490	.3105	.3695	.9345	.2053-01	.1139-01	1.179	8.656	600.8
116	1.0000	1445.0	.18750	.2935	.3558	.9345	.1977-01	.1042-01	1.016	7.437	606.8
116	2.0000	1446.0	.21260	.3264	.3913	.9345	.2174-01	.1181-01	1.194	8.902	603.3
116	2.0000	1448.0	.14320	.2265	.2763	.9345	.1535-01	.7957-02	.7620	5.574	608.6
116	3.0000	1449.0	.22820	.3502	.4197	.9345	.2332-01	.1268-01	1.282	9.399	603.3
116	3.0000	1450.0	.19210	.3364	.4385	.9345	.2436-01	.1067-01	.8760	6.519	622.3
116	3.0000	1451.0	.18150	.3230	.4259	.9345	.2366-01	.1009-01	.8110	6.031	624.0
116	3.0000	1452.0	.15240	.2630	.3394	.9345	.1886-01	.8466-02	.7090	5.243	620.6
116	3.0000	1453.0	.17470	.2737	.3320	.9345	.1844-01	.9707-02	.9460	6.874	607.0
116	4.0000	1454.0	.21780	.3352	.4025	.9345	.2237-01	.1210-01	1.217	8.918	603.8
116	4.0000	1459.0	.70800-01	.1127	.1381	.9345	.7673-02	.3932-02	.3720	4.721	609.7
116	4.0000	1455.0	.15970	.2773	.3593	.9345	.1996-01	.8874-02	.7370	5.488	621.3
116	4.0000	1460.0	.98000-01	.2286	.3895	.9345	.2164-01	.5445-02	.3360	3.957	642.7
116	4.0000	1456.0	.17710	.2766	.3348	.9345	.1860-01	.9842-02	.9640	6.942	606.4
116	5.0000	1457.0	.19260	.2905	.3448	.9345	.1916-01	.1070-01	1.118	8.355	599.9
116	5.0000	1458.0	.18010	.2795	.3372	.9345	.1873-01	.1000-01	.9910	7.257	605.4

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
112	-.8000-01	.0000	3.010	37.30	702.0	249.7	.9990	6.337	2331.	.3357-03	.1998-06	3.916

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
112	.5552-01	.9166-02

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
112	1.0000	1444.0	.25720	.3736	.4346	.9345	.2413-01	.1428-01	1.610	11.88	589.6
112	1.0000	1445.0	.25030	.3695	.4334	.9345	.2407-01	.1390-01	1.514	11.15	593.4
112	2.0000	1446.0	.25820	.3796	.4443	.9345	.2467-01	.1434-01	1.575	11.81	592.4
112	2.0000	1461.0	.11270	.4111	2.288	.9345	.1270	.6260-02	.3030	3.760	653.9
112	2.0000	1448.0	.21920	.3270	.3857	.9345	.2142-01	.1217-01	1.297	9.546	595.7
112	3.0000	1449.0	.28100	.4097	.4775	.9345	.2651-01	.1560-01	1.744	12.87	590.5
112	3.0000	1450.0	.25810	.4178	.5169	.9345	.2870-01	.1433-01	1.317	9.854	610.4
112	3.0000	1451.0	.27850	.4524	.5611	.9345	.3115-01	.1546-01	1.412	10.57	610.9
112	3.0000	1452.0	.25770	.4051	.4924	.9345	.2734-01	.1431-01	1.381	10.29	605.8
112	3.0000	1453.0	.24150	.3538	.4135	.9345	.2296-01	.1341-01	1.483	10.86	591.7
112	4.0000	1454.0	.26460	.3849	.4479	.9345	.2487-01	.1469-01	1.652	12.19	589.9
112	4.0000	1459.0	.97500-01	.1487	.1777	.9345	.9864-02	.5411-02	.5510	7.026	600.4
112	4.0000	1455.0	.22040	.3532	.4343	.9345	.2412-01	.1224-01	1.143	8.559	608.9
112	4.0000	1460.0	.15200	.3296	.5166	.9345	.2868-01	.8441-02	.5500	6.504	637.1
112	4.0000	1456.0	.22980	.3404	.4002	.9345	.2222-01	.1276-01	1.378	9.979	594.3
112	5.0000	1457.0	.24430	.3505	.4051	.9345	.2249-01	.1356-01	1.572	11.82	586.4
112	5.0000	1458.0	.23800	.3467	.4038	.9345	.2242-01	.1321-01	1.480	10.92	590.3

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = .0000 BETA = 5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
114	.0000	4.900	3.010	37.30	704.0	250.2	1.001	6.346	2333.	.3355-03	.2002-06	3.910

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
114	.5558-01	.9171-02

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
114	1.0000	1444.0	.27070	.4409	.5476	.9345	.3044-01	.1505-01	1.371	10.01	612.5
114	1.0000	1445.0	.26120	.4335	.5451	.9345	.3029-01	.1452-01	1.284	9.364	615.1
114	2.0000	1446.0	.26620	.4404	.5524	.9345	.3070-01	.1480-01	1.316	9.763	614.7
114	2.0000	1448.0	.22740	.3845	.4892	.9345	.2719-01	.1264-01	1.088	7.923	617.5
114	3.0000	1449.0	.28620	.4688	.5844	.9345	.3248-01	.1591-01	1.437	10.49	613.3
114	3.0000	1450.0	.23310	.4491	.6301	.9345	.3502-01	.1295-01	.9480	7.023	630.5
114	3.0000	1451.0	.23510	.4567	.6453	.9345	.3586-01	.1307-01	.9480	7.022	631.1
114	3.0000	1452.0	.24200	.4444	.5998	.9345	.3334-01	.1345-01	1.039	7.665	626.4
114	3.0000	1453.0	.22630	.3725	.4658	.9345	.2589-01	.1258-01	1.127	8.167	614.0
114	4.0000	1454.0	.27490	.4452	.5511	.9345	.3063-01	.1528-01	1.405	10.26	611.7
114	4.0000	1459.0	.94800-01	.1545	.1919	.9345	.1067-01	.5267-02	.4800	6.074	612.6
114	4.0000	1455.0	.23030	.4327	.5947	.9345	.3305-01	.1280-01	.9630	7.144	628.4
114	4.0000	1460.0	.14660	.4272	1.051	.9345	.5839-01	.8149-02	.4360	5.127	650.1
114	4.0000	1456.0	.23210	.3899	.4939	.9345	.2745-01	.1290-01	1.122	8.034	616.7
114	5.0000	1457.0	.25520	.4033	.4918	.9345	.2734-01	.1418-01	1.358	10.11	607.8
114	5.0000	1458.0	.25360	.4083	.5036	.9345	.2799-01	.1409-01	1.308	9.556	610.8

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = 5.000 BETA = -5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
122	5.010	-5.000	3.010	37.20	706.0	250.9	.9990	6.335	2336.	.3340-03	.2007-06	3.888

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
122	.5555-01	.9196-02

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
122	1.0000	1444.0	.16710	.2320	.2638	.9345	.1465-01	.9281-02	1.170	8.680	579.6
122	1.0000	1445.0	.16450	.2309	.2639	.9345	.1466-01	.9136-02	1.120	8.297	583.0
122	2.0000	1446.0	.16750	.2335	.2660	.9345	.1478-01	.9302-02	1.160	8.751	580.9
122	2.0000	1461.0	.92800-01	.1848	.2668	.9345	.1482-01	.5153-02	.3650	4.575	634.8
122	2.0000	1448.0	.15200	.2140	.2449	.9345	.1361-01	.8443-02	1.028	7.611	583.8
122	3.0000	1449.0	.18360	.2560	.2916	.9345	.1620-01	.1020-01	1.273	9.442	580.8
122	3.0000	1450.0	.19210	.2870	.3390	.9345	.1883-01	.1067-01	1.138	8.566	599.0
122	3.0000	1451.0	.20000	.3004	.3558	.9345	.1977-01	.1111-01	1.173	8.826	600.0
122	3.0000	1452.0	.17460	.2590	.3046	.9345	.1692-01	.9701-02	1.051	7.863	597.3
122	3.0000	1453.0	.16280	.2281	.2604	.9345	.1447-01	.9042-02	1.114	8.200	582.4
122	4.0000	1454.0	.18730	.2628	.3004	.9345	.1669-01	.1040-01	1.276	9.454	582.9
122	4.0000	1459.0	.83000-01	.1231	.1447	.9345	.8037-02	.4613-02	.5000	6.386	597.1
122	4.0000	1455.0	.17010	.2540	.2999	.9345	.1666-01	.9450-02	1.009	7.596	598.8
122	4.0000	1460.0	.10610	.1775	.2244	.9345	.1246-01	.5894-02	.5170	6.167	617.9
122	4.0000	1456.0	.15760	.2182	.2477	.9345	.1376-01	.8757-02	1.113	8.125	578.5
122	5.0000	1457.0	.17290	.2403	.2734	.9345	.1519-01	.9603-02	1.207	9.107	579.9
122	5.0000	1458.0	.17390	.2424	.2762	.9345	.1534-01	.9661-02	1.206	8.942	580.8

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = 5.000 BETA = .0000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
118	4.960	.0000	3.010	37.20	705.0	250.5	.9980	6.327	2335.	.3341-03	.2004-06	3.891

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
118	.5550-01	.9193-02

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
118	1.0000	1444.0	.21000	.2971	.3410	.9345	.1893-01	.1166-01	1.401	10.37	584.4
118	1.0000	1445.0	.20790	.2975	.3434	.9345	.1906-01	.1154-01	1.349	9.970	587.6
118	2.0000	1446.0	.21000	.2978	.3421	.9345	.1899-01	.1166-01	1.394	10.49	585.0
118	2.0000	1461.0	.77800-01	.1762	.2898	.9345	.1608-01	.4321-02	1.369	10.05	566.5
118	2.0000	1448.0	.16040	.2317	.2686	.9345	.1491-01	.8905-02	1.020	7.532	589.9
118	3.0000	1449.0	.22390	.3151	.3606	.9345	.2001-01	.1243-01	1.512	11.20	582.8
118	3.0000	1450.0	.22010	.3365	.4026	.9345	.2234-01	.1221-01	1.243	9.341	602.7
118	3.0000	1451.0	.21810	.3350	.4018	.9345	.2230-01	.1211-01	1.222	9.178	603.6
118	3.0000	1452.0	.19060	.2874	.3411	.9345	.1893-01	.1058-01	1.107	8.271	599.9
118	3.0000	1453.0	.19050	.2705	.3110	.9345	.1726-01	.1057-01	1.259	9.248	585.5
118	4.0000	1454.0	.21940	.3099	.3553	.9345	.1972-01	.1218-01	1.469	10.87	583.9
118	4.0000	1459.0	.87300-01	.1306	.1542	.9345	.8561-02	.4846-02	.5150	6.574	598.2
118	4.0000	1455.0	.18770	.2873	.3439	.9345	.1909-01	.1042-01	1.058	7.949	602.9
118	4.0000	1460.0	.13100	.2395	.3222	.9345	.1789-01	.7271-02	.5650	6.717	626.8
118	4.0000	1456.0	.17910	.2520	.2884	.9345	.1601-01	.9941-02	1.210	8.815	582.8
118	5.0000	1457.0	.20210	.2832	.3235	.9345	.1795-01	.1122-01	1.380	10.41	581.5
118	5.0000	1458.0	.20080	.2835	.3250	.9345	.1804-01	.1115-01	1.347	9.969	583.7

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = 5.000 BETA = 5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
120	4.990	5.000	3.010	37.30	705.0	250.8	.9990	6.338	2336.	.3344-03	.2006-06	3.893

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
120	.5556-01	.9189-02

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
120	1.0000	1444.0	.22600	.3366	.3969	.9345	.2205-01	.1256-01	1.347	9.904	597.8
120	1.0000	1445.0	.21770	.3269	.3870	.9345	.2150-01	.1210-01	1.277	9.384	599.5
120	2.0000	1446.0	.22230	.3343	.3962	.9345	.2201-01	.1235-01	1.300	9.715	599.9
120	2.0000	1461.0	.10290	.3259	.9921	.9345	.5512-01	.5718-02	.2950	3.659	653.6
120	3.0000	1449.0	.23660	.3533	.4170	.9345	.1893-01	.1039-01	1.064	7.805	602.7
120	3.0000	1450.0	.20880	.3444	.4312	.9345	.2317-01	.1315-01	1.404	10.32	598.3
120	3.0000	1451.0	.21080	.3469	.4338	.9345	.2396-01	.1160-01	1.039	7.756	615.6
120	3.0000	1452.0	.20820	.3320	.4069	.9345	.2410-01	.1171-01	1.052	7.858	615.3
120	3.0000	1453.0	.19550	.2913	.3435	.9345	.2261-01	.1157-01	1.094	8.133	610.5
120	4.0000	1454.0	.23990	.3578	.4221	.9345	.1909-01	.1086-01	1.164	8.501	597.9
120	4.0000	1459.0	.93200-01	.1450	.1751	.9345	.2345-01	.1333-01	1.426	10.48	598.1
120	4.0000	1455.0	.19940	.3244	.4026	.9345	.9730-02	.5176-02	.5110	6.490	606.4
120	4.0000	1460.0	.12370	.2686	.4217	.9345	.2237-01	.1108-01	1.014	7.574	613.6
120	4.0000	1456.0	.18910	.2817	.3322	.9345	.2343-01	.6874-02	.4490	5.305	639.8
120	5.0000	1457.0	.21990	.3220	.3761	.9345	.1846-01	.1050-01	1.126	8.139	597.9
120	5.0000	1458.0	.21190	.3142	.3695	.9345	.2090-01	.1222-01	1.358	10.17	594.0
							.2053-01	.1178-01	1.275	9.380	596.8

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = -5.000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
103	-5.010	-8.900	4.020	72.70	739.0	174.6	.4660	5.277	2603.	.2242-03	.1405-06	4.152

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
103	.5106-01	.1130-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
103	1.0000	1444.0	.23150	.3176	.4012	.9220	.2048-01	.1182-01	1.610	11.81	602.5
103	1.0000	1445.0	.23350	.3227	.4106	.9220	.2096-01	.1192-01	1.593	11.67	605.1
103	2.0000	1446.0	.22530	.3146	.4044	.9220	.2065-01	.1151-01	1.498	11.14	608.6
103	2.0000	1448.0	.16010	.2231	.2861	.9220	.1461-01	.8174-02	1.069	7.821	608.0
103	3.0000	1449.0	.25470	.3536	.4519	.9220	.2307-01	.1300-01	1.717	12.57	606.7
103	3.0000	1450.0	.23390	.3519	.4904	.9220	.2504-01	.1194-01	1.316	9.761	628.6
103	3.0000	1451.0	.26520	.4020	.5652	.9220	.2886-01	.1354-01	1.470	10.90	630.2
103	3.0000	1452.0	.26660	.3919	.5318	.9220	.2716-01	.1361-01	1.573	11.62	623.2
103	3.0000	1453.0	.21430	.2961	.3766	.9220	.1923-01	.1094-01	1.463	10.65	605.0
103	4.0000	1454.0	.24390	.3375	.4299	.9220	.2195-01	.1245-01	1.658	12.14	605.6
103	4.0000	1459.0	.10110	.1436	.1880	.9220	.9597-02	.5160-02	.6430	8.141	614.1
103	4.0000	1455.0	.21900	.3250	.4456	.9220	.2275-01	.1118-01	1.267	9.416	625.4
103	4.0000	1460.0	.10270	.1834	.3275	.9220	.1672-01	.5245-02	.4400	5.161	654.8
103	4.0000	1456.0	.23490	.3258	.4158	.9220	.2123-01	.1200-01	1.589	11.44	606.3
103	5.0000	1457.0	.21540	.2937	.3688	.9220	.1883-01	.1100-01	1.524	11.38	600.2
103	5.0000	1458.0	.22590	.3108	.3937	.9220	.2010-01	.1153-01	1.560	11.43	603.5

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = -5.000 BETA = -5.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
108	-4.980	-5.000	4.020	72.80	735.0	173.6	.4670	5.279	2595.	.2256-03	.1397-06	4.189

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
108	.5103-01	.1126-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
108	1.0000	1444.0	.26180	.3610	.4581	.9220	.2338-01	.1336-01	1.786	13.11	600.8
108	1.0000	1445.0	.27940	.3885	.4973	.9220	.2538-01	.1426-01	1.864	13.67	603.7
108	2.0000	1446.0	.26270	.3682	.4749	.9220	.2423-01	.1341-01	1.719	12.80	606.3
108	2.0000	1461.0	.12010	.3734	-2.065	.9220	-.1054	.6129-02	.3320	4.069	680.4
108	2.0000	1448.0	.21020	.2928	.3753	.9220	.1915-01	.1073-01	1.396	10.23	604.3
108	3.0000	1449.0	.29460	.4104	.5264	.9220	.2686-01	.1503-01	1.956	14.33	604.4
108	3.0000	1450.0	.27540	.4164	.5838	.9220	.2979-01	.1405-01	1.524	11.32	626.1
108	3.0000	1451.0	.29640	.4525	.6419	.9220	.3276-01	.1512-01	1.610	11.95	628.1
108	3.0000	1452.0	.29590	.4389	.6019	.9220	.3071-01	.1510-01	1.702	12.58	621.8
108	3.0000	1453.0	.25340	.3522	.4505	.9220	.2299-01	.1293-01	1.693	12.33	603.6
108	4.0000	1454.0	.28570	.3989	.5125	.9220	.2615-01	.1458-01	1.888	13.83	605.0
108	4.0000	1459.0	.12700	.1823	.2412	.9220	.1231-01	.6479-02	.7840	9.920	613.6
108	4.0000	1455.0	.26750	.4030	.5626	.9220	.2871-01	.1365-01	1.491	11.08	625.3
108	4.0000	1460.0	.16830	.3101	.5876	.9220	.2998-01	.8586-02	.6890	8.081	654.2
108	4.0000	1456.0	.26720	.3754	.4856	.9220	.2478-01	.1364-01	1.737	12.50	607.1
108	5.0000	1457.0	.26120	.3601	.4571	.9220	.2333-01	.1333-01	1.782	13.31	600.8
108	5.0000	1458.0	.27750	.3859	.4940	.9220	.2521-01	.1416-01	1.850	13.57	603.8

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = -5.000 BETA = .0000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
110	-4.940	.0000	4.020	72.70	734.0	173.5	.4660	5.273	2594.	.2255-03	.1396-06	4.189

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
110	.5100-01	.1126-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
110	1.0000	1444.0	.29380	.4069	.5187	.9220	.2645-01	.1499-01	1.979	14.52	602.0
110	1.0000	1445.0	.29820	.4177	.5387	.9220	.2747-01	.1521-01	1.950	14.28	605.8
110	2.0000	1446.0	.29000	.4077	.5276	.9220	.2691-01	.1479-01	1.881	14.00	606.9
110	2.0000	1461.0	.18750	.6798	-1.444	.9220	-.7365-01	.9561-02	.4850	5.932	683.4
110	2.0000	1448.0	.24940	.3515	.4560	.9220	.2326-01	.1272-01	1.607	11.76	607.7
110	3.0000	1449.0	.31890	.4447	.5706	.9220	.2910-01	.1627-01	2.112	15.48	604.2
110	3.0000	1450.0	.30620	.4633	.6501	.9220	.3315-01	.1562-01	1.690	12.55	625.8
110	3.0000	1451.0	.32990	.5046	.7172	.9220	.3658-01	.1683-01	1.784	13.24	628.0
110	3.0000	1452.0	.33460	.4967	.6816	.9220	.3476-01	.1706-01	1.919	14.18	621.6
110	3.0000	1453.0	.28110	.3927	.5049	.9220	.2575-01	.1434-01	1.852	13.48	604.9
110	4.0000	1454.0	.30390	.4233	.5426	.9220	.2767-01	.1550-01	2.017	14.79	603.9
110	4.0000	1459.0	.13210	.1914	.2558	.9220	.1305-01	.6735-02	.7970	10.08	615.7
110	4.0000	1455.0	.28950	.4371	.6118	.9220	.3120-01	.1477-01	1.605	11.93	625.4
110	4.0000	1460.0	.22300	.4117	.7825	.9220	.3991-01	.1137-01	.9110	10.68	654.0
110	4.0000	1456.0	.29370	.4168	.5445	.9220	.2777-01	.1498-01	1.863	13.39	609.7
110	5.0000	1457.0	.27780	.3818	.4832	.9220	.2464-01	.1417-01	1.908	14.26	599.4
110	5.0000	1458.0	.29410	.4091	.5238	.9220	.2671-01	.1500-01	1.958	14.36	603.5

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = -5.000 BETA = 5.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
106	-4.970	5.000	4.020	72.80	739.0	174.6	.4670	5.279	2603.	.2242-03	.1406-06	4.152

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
106	.5107-01	.1130-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
106	1.0000	1444.0	.33870	.4854	.6407	.9220	.3272-01	.1730-01	2.115	15.41	616.7
106	1.0000	1445.0	.34200	.4951	.6607	.9220	.3375-01	.1746-01	2.086	15.18	619.5
106	2.0000	1446.0	.31990	.4654	.6247	.9220	.3190-01	.1634-01	1.930	14.27	620.8
106	2.0000	1461.0	.16940	.6936	-.9471	.9220	-.4837-01	.8654-02	.4230	5.163	690.0
106	2.0000	1448.0	.27560	.4036	.5455	.9220	.2786-01	.1407-01	1.639	11.91	622.4
106	3.0000	1449.0	.35340	.5096	.6772	.9220	.3459-01	.1805-01	2.175	15.83	618.4
106	3.0000	1450.0	.31260	.4953	.7363	.9220	.3760-01	.1597-01	1.599	11.80	638.8
106	3.0000	1451.0	.34400	.5509	.8305	.9220	.4241-01	.1757-01	1.729	12.75	640.5
106	3.0000	1452.0	.35400	.5474	.7889	.9220	.4029-01	.1808-01	1.890	13.88	634.4
106	3.0000	1453.0	.29750	.4266	.5636	.9220	.2878-01	.1519-01	1.855	13.42	616.9
106	4.0000	1454.0	.33490	.4805	.6351	.9220	.3243-01	.1710-01	2.086	15.19	617.0
106	4.0000	1459.0	.12850	.1890	.2567	.9220	.1311-01	.6564-02	.7580	9.546	623.5
106	4.0000	1455.0	.30270	.4761	.7008	.9220	.3579-01	.1546-01	1.569	11.59	637.5
106	4.0000	1460.0	.23390	.4644	1.037	.9220	.5296-01	.1194-01	.8890	10.37	664.5
106	4.0000	1456.0	.30260	.4398	.5894	.9220	.3010-01	.1545-01	1.831	13.09	620.5
106	5.0000	1457.0	.29990	.4222	.5471	.9220	.2794-01	.1532-01	1.953	14.51	611.4
106	5.0000	1458.0	.30260	.4301	.5629	.9220	.2875-01	.1545-01	1.926	14.04	614.3

IH72, OTS DIRTY,RGT SRB FWD SEPART MOTOR HI/HREF (RVZM14)

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = -5.000 BETA = 9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
102	-4.950	9.000	4.020	72.70	737.0	174.2	.4660	5.277	2600.	.2246-03	.1403-06	4.163

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
102	.5105-01	.1129-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
102	1.0000	1444.0	.35360	.5256	.7222	.9220	.3687-01	.1805-01	2.034	14.76	624.7
102	1.0000	1445.0	.34660	.5212	.7260	.9220	.3706-01	.1769-01	1.947	14.11	627.3
102	2.0000	1446.0	.33370	.5050	.7088	.9220	.3618-01	.1703-01	1.851	13.64	628.7
102	2.0000	1448.0	.30680	.4694	.6676	.9220	.3408-01	.1566-01	1.666	12.05	630.9
102	3.0000	1449.0	.35960	.5374	.7430	.9220	.3793-01	.1836-01	2.046	14.84	625.9
102	3.0000	1450.0	.31700	.5267	.8367	.9220	.4271-01	.1618-01	1.498	11.03	644.8
102	3.0000	1451.0	.34830	.5845	.9425	.9220	.4811-01	.1778-01	1.622	11.93	646.1
102	3.0000	1452.0	.36400	.5873	.8944	.9220	.4565-01	.1858-01	1.802	13.20	640.4
102	3.0000	1453.0	.31900	.4727	.6475	.9220	.3305-01	.1628-01	1.846	13.31	624.0
102	4.0000	1454.0	.34930	.5158	.7036	.9220	.3592-01	.1783-01	2.036	14.79	623.2
102	4.0000	1459.0	.13610	.2038	.2825	.9220	.1442-01	.6947-02	.7710	9.697	626.4
102	4.0000	1455.0	.31050	.5071	.7858	.9220	.4011-01	.1585-01	1.507	11.11	642.3
102	4.0000	1460.0	.24600	.5407	1.644	.9220	.8394-01	.1256-01	.8490	9.882	669.7
102	4.0000	1456.0	.31090	.4664	.6478	.9220	.3307-01	.1587-01	1.755	12.51	626.8
102	5.0000	1457.0	.31620	.4560	.6062	.9220	.3094-01	.1614-01	1.941	14.38	617.1
102	5.0000	1458.0	.33140	.4835	.6509	.9220	.3323-01	.1692-01	1.982	14.41	620.2

PARAMETRIC DATA

ALPHA = .0000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
96	-.3000-01	-9.100	4.020	72.70	752.0	177.7	.4660	5.277	2626.	.2202-03	.1431-06	4.041

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
96	.5119-01	.1143-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
96	1.0000	1444.0	.14140	.1901	.2354	.9220	.1205-01	.7238-02	1.063	7.787	605.3
96	1.0000	1445.0	.12920	.1769	.2229	.9220	.1141-01	.6615-02	.9240	6.741	612.6
96	2.0000	1446.0	.14930	.2033	.2549	.9220	.1305-01	.7640-02	1.082	8.039	610.6
96	2.0000	1461.0	.86100-01	.1757	.4212	.9220	.2156-01	.4406-02	.3250	3.987	678.4
96	2.0000	1462.0	.15860	.3975	2.544	.9220	.1302	.8117-02	.5080	5.855	689.6
96	2.0000	1448.0	.11430	.1572	.1989	.9220	.1018-01	.5850-02	.8070	5.884	614.3
96	3.0000	1449.0	.17750	.2436	.3077	.9220	.1575-01	.9087-02	1.260	9.191	613.5
96	3.0000	1450.0	.16350	.2415	.3295	.9220	.1686-01	.8370-02	.9750	7.208	635.7
96	3.0000	1451.0	.16360	.2442	.3373	.9220	.1727-01	.8374-02	.9540	7.044	638.3
96	3.0000	1452.0	.14660	.2135	.2867	.9220	.1468-01	.7506-02	.9010	6.630	632.1
96	3.0000	1453.0	.13280	.1831	.2324	.9220	.1190-01	.6799-02	.9310	6.742	615.2
96	4.0000	1454.0	.17600	.2423	.3070	.9220	.1571-01	.9008-02	1.238	9.030	614.7
96	4.0000	1459.0	.77100-01	.1127	.1519	.9220	.7776-02	.3946-02	.4700	5.895	633.1
96	4.0000	1455.0	.16450	.2455	.3390	.9220	.1735-01	.8418-02	.9590	7.083	638.2
96	4.0000	1460.0	.87700-01	.1459	.2322	.9220	.1188-01	.4489-02	.4230	4.954	657.9
96	4.0000	1456.0	.13360	.1840	.2335	.9220	.1195-01	.6836-02	.9370	6.719	615.1
96	5.0000	1457.0	.16350	.2249	.2848	.9220	.1458-01	.8367-02	1.152	8.544	614.5
96	5.0000	1458.0	.16650	.2330	.3001	.9220	.1536-01	.8523-02	1.123	8.166	620.4

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = .0000 BETA = -5.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
84	-.1000-01	-5.100	4.020	72.70	747.0	176.4	.4660	5.274	2616.	.2217-03	.1420-06	4.084

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
84	.5112-01	.1138-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
84	1.0000	1444.0	.16940	.2330	.2951	.9220	.1509-01	.8658-02	1.183	8.648	610.0
84	1.0000	1445.0	.15630	.2208	.2872	.9220	.1468-01	.7992-02	1.021	7.433	618.9
84	2.0000	1446.0	.17380	.2420	.3102	.9220	.1586-01	.8886-02	1.177	8.731	614.2
84	2.0000	1461.0	.70200-01	.1561	.4975	.9220	.2543-01	.3587-02	.2430	2.984	678.9
84	2.0000	1462.0	.15730	.5793	-1.153	.9220	-.5895-01	.8041-02	.4120	4.738	695.4
84	2.0000	1448.0	.11150	.1576	.2050	.9220	.1048-01	.5701-02	.7280	5.298	619.0
84	3.0000	1449.0	.19690	.2757	.3554	.9220	.1817-01	.1007-01	1.315	9.579	616.1
84	3.0000	1450.0	.16650	.2537	.3591	.9220	.1836-01	.8512-02	.9240	6.825	638.1
84	3.0000	1451.0	.17430	.2696	.3886	.9220	.1986-01	.8913-02	.9420	6.944	641.0
84	3.0000	1452.0	.16450	.2477	.3454	.9220	.1766-01	.8412-02	.9360	6.870	635.5
84	3.0000	1453.0	.15770	.2225	.2891	.9220	.1478-01	.8063-02	1.033	7.469	618.5
84	4.0000	1454.0	.20000	.2814	.3644	.9220	.1863-01	.1023-01	1.320	9.614	617.6
84	4.0000	1459.0	.77900-01	.1149	.1564	.9220	.7996-02	.3983-02	.4620	5.804	630.6
84	4.0000	1455.0	.17330	.2644	.3749	.9220	.1917-01	.8858-02	.9590	7.081	638.4
84	4.0000	1460.0	.10990	.1910	.3256	.9220	.1664-01	.5619-02	.4940	5.779	658.8
84	4.0000	1456.0	.15630	.2198	.2846	.9220	.1455-01	.7991-02	1.033	7.394	617.5
84	5.0000	1457.0	.18450	.2572	.3301	.9220	.1688-01	.9433-02	1.245	9.238	614.6
84	5.0000	1458.0	.17830	.2524	.3291	.9220	.1682-01	.9113-02	1.158	8.423	619.6

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
80	.2000-01	.0000	4.020	72.70	751.0	177.5	.4660	5.277	2624.	.2205-03	.1429-06	4.048

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
80	.5118-01	.1142-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
80	1.0000	1444.0	.24420	.3235	.3954	.9220	.2023-01	.1250-01	1.915	14.08	598.0
80	1.0000	1445.0	.24690	.3301	.4070	.9220	.2083-01	.1263-01	1.881	13.80	602.4
80	2.0000	1446.0	.24410	.3254	.4000	.9220	.2047-01	.1249-01	1.878	14.03	600.9
80	2.0000	1462.0	.31310	.8411	15.13	.9220	.7742	.1602-01	.9590	11.04	691.4
80	2.0000	1448.0	.20240	.2715	.3356	.9220	.1718-01	.1036-01	1.530	11.22	603.6
80	3.0000	1449.0	.26190	.3466	.4232	.9220	.2166-01	.1341-01	2.061	15.16	597.5
80	3.0000	1450.0	.28100	.3953	.5119	.9220	.2620-01	.1438-01	1.869	13.91	621.3
80	3.0000	1451.0	.29510	.4178	.5448	.9220	.2788-01	.1510-01	1.931	14.36	623.4
80	3.0000	1452.0	.27440	.3811	.4871	.9220	.2493-01	.1404-01	1.884	13.96	617.1
80	3.0000	1453.0	.23430	.3125	.3843	.9220	.1967-01	.1199-01	1.800	13.12	601.1
80	4.0000	1454.0	.25960	.3449	.4227	.9220	.2163-01	.1328-01	2.017	14.81	599.5
80	4.0000	1459.0	.12140	.1704	.2202	.9220	.1127-01	.6214-02	.8120	10.24	620.6
80	4.0000	1455.0	.26630	.3768	.4908	.9220	.2512-01	.1363-01	1.746	12.99	623.2
80	4.0000	1460.0	.20390	.3293	.5021	.9220	.2570-01	.1044-01	1.030	12.08	652.6
80	4.0000	1456.0	.24100	.3228	.3985	.9220	.2040-01	.1233-01	1.828	13.18	603.1
80	5.0000	1457.0	.24310	.3215	.3924	.9220	.2008-01	.1244-01	1.917	14.34	597.2
80	5.0000	1458.0	.25430	.3403	.4197	.9220	.2148-01	.1302-01	1.936	14.20	602.5

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = .0000 BETA = 5.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
82	.1000-01	5.100	4.020	72.70	750.0	177.2	.4660	5.274	2622.	.2207-03	.1427-06	4.057

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
82	.5116-01	.1141-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
82	1.0000	1444.0	.24870	.3596	.4792	.9220	.2451-01	.1272-01	1.548	11.21	628.4
82	1.0000	1445.0	.23680	.3457	.4655	.9220	.2381-01	.1211-01	1.442	10.43	630.9
82	2.0000	1446.0	.24290	.3547	.4780	.9220	.2445-01	.1242-01	1.478	10.87	631.1
82	2.0000	1462.0	.21450	1.908	-.5579	.9220	-.2854-01	.1097-01	.4640	5.301	707.8
82	2.0000	1448.0	.18640	.2736	.3706	.9220	.1896-01	.9535-02	1.122	8.113	632.3
82	3.0000	1449.0	.25560	.3698	.4931	.9220	.2523-01	.1307-01	1.588	11.50	628.6
82	3.0000	1450.0	.21610	.3444	.5157	.9220	.2638-01	.1106-01	1.113	8.178	649.3
82	3.0000	1451.0	.22690	.3671	.5616	.9220	.2873-01	.1161-01	1.139	8.355	651.9
82	3.0000	1452.0	.23430	.3643	.5283	.9220	.2702-01	.1199-01	1.260	9.213	644.9
82	3.0000	1453.0	.20830	.3026	.4053	.9220	.2073-01	.1066-01	1.283	9.222	629.6
82	4.0000	1454.0	.25660	.3720	.4973	.9220	.2544-01	.1313-01	1.587	11.49	629.1
82	4.0000	1459.0	.10040	.1512	.2109	.9220	.1079-01	.5138-02	.5740	7.177	638.3
82	4.0000	1455.0	.22530	.3557	.5260	.9220	.2691-01	.1153-01	1.180	8.672	647.7
82	4.0000	1460.0	.14340	.2778	.5846	.9220	.2991-01	.7337-02	.5690	6.610	672.5
82	4.0000	1456.0	.21310	.3125	.4229	.9220	.2163-01	.1090-01	1.286	9.144	632.1
82	5.0000	1457.0	.23790	.3403	.4485	.9220	.2295-01	.1217-01	1.515	11.18	625.5
82	5.0000	1458.0	.23670	.3440	.4612	.9220	.2359-01	.1211-01	1.455	10.53	629.8

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = .0000 BETA = 9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
94	.1000-01	9.100	4.020	72.80	754.0	178.2	.4670	5.281	2629.	.2198-03	.1434-06	4.029

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
94	.5122-01	.1145-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
94	1.0000	1444.0	.28200	.4170	.5696	.9220	.2918-01	.1445-01	1.683	12.13	637.6
94	1.0000	1445.0	.27740	.4132	.5691	.9220	.2915-01	.1421-01	1.631	11.75	639.3
94	2.0000	1446.0	.26540	.3973	.5507	.9220	.2821-01	.1359-01	1.543	11.30	640.5
94	2.0000	1461.0	.11490	.3935	-1.100	.9220	-.5632-01	.5886-02	.3130	3.806	700.8
94	2.0000	1448.0	.23140	.3457	.4779	.9220	.2448-01	.1185-01	1.351	9.734	640.0
94	3.0000	1449.0	.28910	.4293	.5893	.9220	.3019-01	.1481-01	1.710	12.32	638.6
94	3.0000	1450.0	.24660	.4018	.6204	.9220	.3178-01	.1263-01	1.233	9.028	656.4
94	3.0000	1451.0	.25340	.4190	.6609	.9220	.3385-01	.1298-01	1.238	9.055	658.7
94	3.0000	1452.0	.26310	.4185	.6253	.9220	.3203-01	.1347-01	1.368	9.963	652.5
94	3.0000	1453.0	.23880	.3505	.4748	.9220	.2432-01	.1223-01	1.447	10.38	635.7
94	4.0000	1454.0	.28250	.4182	.5721	.9220	.2931-01	.1447-01	1.681	12.12	637.9
94	4.0000	1459.0	.10170	.1536	.2151	.9220	.1102-01	.5211-02	.5810	7.259	642.5
94	4.0000	1455.0	.25170	.4084	.6270	.9220	.3212-01	.1289-01	1.267	9.277	655.8
94	4.0000	1460.0	.16580	.3403	.8289	.9220	.4246-01	.8493-02	.6240	7.229	680.5
94	4.0000	1456.0	.24110	.3591	.4948	.9220	.2535-01	.1235-01	1.416	10.03	639.4
94	5.0000	1457.0	.25920	.3770	.5057	.9220	.2591-01	.1328-01	1.601	11.77	633.4
94	5.0000	1458.0	.27160	.4002	.5446	.9220	.2790-01	.1391-01	1.632	11.77	636.7

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = 5.000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

•••TEST CONDITIONS•••

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
100	5.010	-9.100	4.020	72.80	721.0	170.3	.4670	5.278	2571.	.2298-03	.1371-06	4.308

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
100	.5089-01	.1113-01

•••TEST DATA•••

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
100	1.0000	1444.0	.10980	.1449	.1765	.9220	.8984-02	.5588-02	.8310	6.189	572.1
100	1.0000	1445.0	.10870	.1448	.1778	.9220	.9049-02	.5533-02	.8000	5.948	576.1
100	2.0000	1446.0	.11480	.1521	.1860	.9220	.9465-02	.5844-02	.8590	6.500	573.9
100	2.0000	1461.0	.84400-01	.1510	.2704	.9220	.1376-01	.4298-02	.3510	4.394	639.1
100	2.0000	1462.0	.10870	.1974	.3631	.9220	.1848-01	.5534-02	.4440	5.241	640.6
100	2.0000	1448.0	.10700	.1437	.1778	.9220	.9049-02	.5446-02	.7690	5.705	579.6
100	3.0000	1449.0	.12850	.1703	.2082	.9220	.1059-01	.6540-02	.9610	7.148	573.9
100	3.0000	1450.0	.13890	.1944	.2504	.9220	.1274-01	.7071-02	.8930	6.738	594.5
100	3.0000	1451.0	.14220	.2011	.2619	.9220	.1333-01	.7234-02	.8890	6.598	597.9
100	3.0000	1452.0	.13550	.1890	.2426	.9220	.1235-01	.6898-02	.8790	6.585	593.5
100	3.0000	1453.0	.11510	.1545	.1910	.9220	.9723-02	.5859-02	.8290	6.108	579.3
100	4.0000	1454.0	.13320	.1774	.2179	.9220	.1109-01	.6778-02	.9810	7.287	576.1
100	4.0000	1459.0	.74500-01	.1072	.1421	.9220	.7234-02	.3792-02	.4480	5.702	602.7
100	4.0000	1455.0	.13160	.1875	.2461	.9220	.1253-01	.6695-02	.8090	6.084	600.0
100	4.0000	1460.0	.86800-01	.1323	.1872	.9220	.9527-02	.4420-02	.4640	5.536	615.9
100	4.0000	1456.0	.11530	.1546	.1911	.9220	.9724-02	.5867-02	.8320	6.068	579.1
100	5.0000	1457.0	.12860	.1732	.2148	.9220	.1093-01	.6546-02	.9180	6.922	580.6
100	5.0000	1458.0	.12900	.1752	.2191	.9220	.1115-01	.6566-02	.8980	6.645	584.1

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = 5.000 BETA = -5.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
90	5.050	-5.100	4.020	72.60	746.0	176.3	.4660	5.270	2616.	.2217-03	.1419-06	4.085

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
90	.5110-01	.1138-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
90	1.0000	1444.0	.12890	.1677	.2017	.9220	.1031-01	.6586-02	1.062	7.856	585.0
90	1.0000	1445.0	.14360	.1884	.2283	.9220	.1166-01	.7336-02	1.151	8.494	589.3
90	2.0000	1446.0	.13270	.1733	.2093	.9220	.1069-01	.6778-02	1.077	8.100	587.2
90	2.0000	1462.0	.16230	.2890	.5134	.9220	.2623-01	.8295-02	.7060	8.251	661.0
90	2.0000	1448.0	.12910	.1704	.2075	.9220	.1060-01	.6597-02	1.016	7.492	592.1
90	3.0000	1449.0	.15490	.2019	.2432	.9220	.1243-01	.7915-02	1.269	9.383	585.9
90	3.0000	1450.0	.19190	.2614	.3280	.9220	.1676-01	.9805-02	1.375	10.31	605.9
90	3.0000	1451.0	.19950	.2739	.3462	.9220	.1769-01	.1019-01	1.399	10.48	608.9
90	3.0000	1452.0	.16930	.2298	.2873	.9220	.1468-01	.8649-02	1.225	9.134	604.5
90	3.0000	1453.0	.14480	.1906	.2316	.9220	.1183-01	.7400-02	1.149	8.422	590.8
90	4.0000	1454.0	.14720	.1920	.2315	.9220	.1183-01	.7521-02	1.202	8.887	586.3
90	4.0000	1459.0	.90900-01	.1268	.1629	.9220	.8322-02	.4643-02	.6110	7.736	614.5
90	4.0000	1455.0	.17240	.2375	.3012	.9220	.1539-01	.8809-02	1.199	8.975	610.1
90	4.0000	1460.0	.12010	.1773	.2418	.9220	.1235-01	.6139-02	.7100	8.422	630.5
90	4.0000	1456.0	.14620	.1920	.2329	.9220	.1190-01	.7469-02	1.167	8.469	589.9
90	5.0000	1457.0	.14270	.1871	.2266	.9220	.1158-01	.7290-02	1.145	8.601	589.1
90	5.0000	1458.0	.15520	.2048	.2495	.9220	.1275-01	.7929-02	1.221	9.000	592.2

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = 5.000 BETA = .0000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
86	5.100	.0000	4.020	72.80	747.0	176.5	.4670	5.280	2617.	.2219-03	.1421-06	4.087

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
86	.5115-01	.1138-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
86	1.0000	1444.0	.17410	.2303	.2811	.9220	.1438-01	.8905-02	1.363	10.04	593.9
86	1.0000	1445.0	.17320	.2302	.2821	.9220	.1443-01	.8860-02	1.337	9.839	596.0
86	2.0000	1446.0	.16860	.2238	.2740	.9220	.1402-01	.8624-02	1.306	9.776	595.5
86	2.0000	1462.0	.19540	.4131	1.097	.9220	.5614-01	.9998-02	.7090	8.222	676.0
86	2.0000	1448.0	.14620	.1943	.2380	.9220	.1218-01	.7481-02	1.130	8.317	595.8
86	3.0000	1449.0	.18960	.2510	.3066	.9220	.1569-01	.9697-02	1.480	10.90	594.3
86	3.0000	1450.0	.20960	.2915	.3732	.9220	.1909-01	.1072-01	1.425	10.64	614.0
86	3.0000	1451.0	.21200	.2962	.3810	.9220	.1949-01	.1084-01	1.424	10.63	615.5
86	3.0000	1452.0	.18700	.2566	.3240	.9220	.1658-01	.9566-02	1.318	9.801	609.1
86	3.0000	1453.0	.16510	.2190	.2681	.9220	.1371-01	.8444-02	1.280	9.361	595.3
86	4.0000	1454.0	.18650	.2481	.3043	.9220	.1556-01	.9541-02	1.436	10.57	596.4
86	4.0000	1459.0	.95800-01	.1344	.1736	.9220	.8882-02	.4899-02	.6360	8.043	617.0
86	4.0000	1455.0	.19120	.2668	.3426	.9220	.1752-01	.9782-02	1.290	9.634	615.0
86	4.0000	1460.0	.13350	.2017	.2824	.9220	.1445-01	.6830-02	.7550	8.925	636.4
86	4.0000	1456.0	.16440	.2176	.2659	.9220	.1360-01	.8408-02	1.283	9.289	594.3
86	5.0000	1457.0	.17790	.2358	.2884	.9220	.1475-01	.9101-02	1.384	10.37	594.8
86	5.0000	1458.0	.17680	.2356	.2896	.9220	.1481-01	.9044-02	1.353	9.949	597.3

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = 5.000 BETA = 5.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
88	5.100	5.100	4.020	72.80	746.0	176.4	.4670	5.278	2616.	.2219-03	.1420-06	4.088

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
88	.5114-01	.1138-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
88	1.0000	1444.0	.20970	.2869	.3614	.9220	.1848-01	.1073-01	1.489	10.89	607.7
88	1.0000	1445.0	.19980	.2753	.3491	.9220	.1785-01	.1022-01	1.392	10.17	610.3
88	2.0000	1446.0	.20420	.2809	.3558	.9220	.1820-01	.1044-01	1.426	10.60	609.9
88	2.0000	1461.0	.11300	.2390	.6358	.9220	.3251-01	.5779-02	.4090	5.028	675.7
88	2.0000	1462.0	.19240	.5626	-7.247	.9220	-.3706	.9838-02	.5580	6.433	689.8
88	2.0000	1448.0	.15910	.2198	.2795	.9220	.1429-01	.8134-02	1.099	8.029	611.3
88	3.0000	1449.0	.22160	.3042	.3845	.9220	.1966-01	.1133-01	1.557	11.39	609.1
88	3.0000	1450.0	.20720	.3014	.4043	.9220	.2067-01	.1060-01	1.266	9.398	627.0
88	3.0000	1451.0	.21100	.3083	.4156	.9220	.2125-01	.1079-01	1.276	9.466	628.2
88	3.0000	1452.0	.20700	.2958	.3893	.9220	.1991-01	.1059-01	1.317	9.732	622.1
88	3.0000	1453.0	.17720	.2431	.3070	.9220	.1570-01	.9064-02	1.249	9.070	608.7
88	4.0000	1454.0	.22220	.3064	.3889	.9220	.1989-01	.1136-01	1.543	11.27	610.7
88	4.0000	1459.0	.98700-01	.1425	.1895	.9220	.9692-02	.5050-02	.6140	7.729	624.9
88	4.0000	1455.0	.20380	.2968	.3986	.9220	.2038-01	.1042-01	1.241	9.214	627.4
88	4.0000	1460.0	.12010	.2011	.3232	.9220	.1653-01	.6143-02	.5690	6.675	653.8
88	4.0000	1456.0	.16130	.2207	.2780	.9220	.1421-01	.8248-02	1.144	8.230	607.8
88	5.0000	1457.0	.20370	.2786	.3509	.9220	.1794-01	.1041-01	1.445	10.76	607.7
88	5.0000	1458.0	.20110	.2772	.3519	.9220	.1799-01	.1028-01	1.397	10.21	610.6

IH72, OTS DIRTY,RGT SRB FWD SEPART MOTOR HI/HREF (RVZM24)

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = 5.000 BETA = 9.000 IH NO = 72.00 MACH = 4.020

•••TEST CONDITIONS•••

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
98	5.080	9.000	4.020	72.60	736.0	173.8	.4650	5.265	2597.	.2246-03	.1400-06	4.168

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
98	.5097-01	.1129-01

•••TEST DATA•••

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
98	1.0000	1444.0	.23390	.3337	.4384	.9220	.2234-01	.1192-01	1.467	10.71	612.7
98	1.0000	1445.0	.21210	.3045	.4028	.9220	.2053-01	.1081-01	1.310	9.551	614.5
98	2.0000	1446.0	.22260	.3209	.4263	.9220	.2173-01	.1135-01	1.363	10.11	615.6
98	2.0000	1461.0	.77300-01	.2083	4.037	.9220	.2058	.3942-02	.2310	2.832	677.2
98	2.0000	1462.0	.18130	.9825	-.6663	.9220	-.3396-01	.9242-02	.4170	4.804	690.6
98	2.0000	1448.0	.16850	.2439	.3254	.9220	.1658-01	.8589-02	1.022	7.447	616.7
98	3.0000	1449.0	.23450	.3367	.4454	.9220	.2270-01	.1195-01	1.448	10.56	614.5
98	3.0000	1450.0	.20300	.3147	.4546	.9220	.2317-01	.1035-01	1.073	7.949	632.0
98	3.0000	1451.0	.20700	.3224	.4686	.9220	.2389-01	.1055-01	1.085	8.030	632.9
98	3.0000	1452.0	.20300	.3075	.4319	.9220	.2202-01	.1035-01	1.121	8.260	627.4
98	3.0000	1453.0	.18230	.2619	.3465	.9220	.1766-01	.9294-02	1.126	8.152	614.6
98	4.0000	1454.0	.23940	.3468	.4631	.9220	.2361-01	.1220-01	1.449	10.55	616.9
98	4.0000	1459.0	.90100-01	.1365	.1916	.9220	.9769-02	.4595-02	.4980	6.260	627.3
98	4.0000	1455.0	.19180	.2973	.4297	.9220	.2190-01	.9774-02	1.013	7.501	632.1
98	4.0000	1460.0	.10960	.2039	.3934	.9220	.2005-01	.5589-02	.4450	5.208	656.1
98	4.0000	1456.0	.17460	.2506	.3312	.9220	.1688-01	.8901-02	1.080	7.748	614.3
98	5.0000	1457.0	.22000	.3157	.4174	.9220	.2127-01	.1121-01	1.361	10.10	614.3
98	5.0000	1458.0	.20890	.3027	.4043	.9220	.2061-01	.1065-01	1.264	9.203	617.0

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = -5.000 BETA = -5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
264	-5.090	-5.100	3.010	37.10	705.0	250.7	.9940	6.302	2335.	.3326-03	.2005-06	3.873

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
264	.5540-01	.9214-02

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
264	1.0000	1444.0	.22700	.3179	.3629	.9345	.2010-01	.1258-01	1.551	11.49	581.6
264	1.0000	1445.0	.22710	.3187	.3642	.9345	.2018-01	.1258-01	1.544	11.44	582.2
264	2.0000	1446.0	.22540	.3150	.3592	.9345	.1990-01	.1248-01	1.547	11.66	581.0
264	2.0000	1447.0	.20850	.2923	.3340	.9345	.1850-01	.1155-01	1.419	10.77	582.0
264	2.0000	1448.0	.21530	.3041	.3487	.9345	.1932-01	.1193-01	1.439	10.65	584.2
264	3.0000	1449.0	.24900	.3511	.4022	.9345	.2228-01	.1379-01	1.672	12.38	583.7
264	3.0000	1450.0	.22430	.3152	.3604	.9345	.1997-01	.1243-01	1.520	11.53	582.6
264	3.0000	1451.0	.21930	.3083	.3527	.9345	.1954-01	.1215-01	1.483	11.25	582.8
264	3.0000	1452.0	.21250	.2964	.3377	.9345	.1871-01	.1177-01	1.467	11.06	580.3
264	3.0000	1453.0	.21500	.2989	.3400	.9345	.1884-01	.1191-01	1.495	11.02	579.3
264	4.0000	1454.0	.24300	.3426	.3924	.9345	.2174-01	.1346-01	1.633	12.09	583.6
264	4.0000	1455.0	.20530	.2880	.3290	.9345	.1823-01	.1137-01	1.396	10.60	582.1
264	4.0000	1456.0	.20530	.2858	.3254	.9345	.1802-01	.1137-01	1.423	10.38	579.8
264	5.0000	1457.0	.21440	.2992	.3410	.9345	.1889-01	.1188-01	1.478	11.15	580.5

IH72, OTS CLEAN,RGT SRB FWD SEPART MOTOR HI/HREF (RVZM26)

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = -5.000 BETA = .0000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
260	-5.080	.0000	3.010	37.10	705.0	250.7	.9940	6.303	2335.	.3326-03	.2005-06	3.874

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
260	.5540-01	.9213-02

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
260	1.0000	1444.0	.25450	.3610	.4018	.9345	.2298-01	.1410-01	1.684	12.46	585.5
260	1.0000	1445.0	.23820	.3388	.3899	.9345	.2160-01	.1320-01	1.566	11.58	586.2
260	2.0000	1446.0	.24550	.3463	.3968	.9345	.2199-01	.1360-01	1.647	12.40	583.8
260	2.0000	1447.0	.22400	.3170	.3638	.9345	.2015-01	.1241-01	1.492	11.31	584.7
260	2.0000	1448.0	.22420	.3203	.3693	.9345	.2046-01	.1242-01	1.460	10.79	587.4
260	3.0000	1449.0	.26950	.3826	.4399	.9345	.2437-01	.1493-01	1.779	13.16	585.7
260	3.0000	1450.0	.23680	.3353	.3848	.9345	.2132-01	.1312-01	1.575	11.94	584.8
260	3.0000	1451.0	.22850	.3237	.3718	.9345	.2060-01	.1266-01	1.516	11.49	585.1
260	3.0000	1452.0	.22380	.3147	.3601	.9345	.1995-01	.1240-01	1.512	11.39	582.9
260	3.0000	1453.0	.22390	.3138	.3585	.9345	.1986-01	.1241-01	1.527	11.24	581.9
260	4.0000	1454.0	.25800	.3657	.4200	.9345	.2327-01	.1430-01	1.711	12.66	585.2
260	4.0000	1455.0	.21860	.3080	.3527	.9345	.1954-01	.1211-01	1.470	11.15	583.5
260	4.0000	1456.0	.21400	.2993	.3415	.9345	.1892-01	.1185-01	1.465	10.68	581.3
260	5.0000	1457.0	.22940	.3216	.3674	.9345	.2036-01	.1271-01	1.563	11.78	582.0

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = -5.000 BETA = 5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
262	-5.090	5.100	3.010	37.10	705.0	250.8	.9950	6.310	2336.	.3328-03	.2006-06	3.875

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
262	.5544-01	.9211-02

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
262	1.0000	1444.0	.27880	.4119	.4834	.9345	.2680-01	.1545-01	1.686	12.41	596.2
262	1.0000	1445.0	.28970	.4280	.5024	.9345	.2785-01	.1606-01	1.752	12.89	596.2
262	2.0000	1446.0	.26970	.3952	.4618	.9345	.2560-01	.1495-01	1.661	12.45	594.2
262	2.0000	1447.0	.24200	.3548	.4147	.9345	.2299-01	.1341-01	1.488	11.22	594.4
262	2.0000	1448.0	.24830	.3672	.4312	.9345	.2391-01	.1376-01	1.499	11.03	596.4
262	3.0000	1449.0	.28770	.4232	.4956	.9345	.2747-01	.1595-01	1.757	12.93	595.2
262	3.0000	1450.0	.25430	.3726	.4354	.9345	.2414-01	.1410-01	1.566	11.82	594.2
262	3.0000	1451.0	.24310	.3563	.4164	.9345	.2308-01	.1348-01	1.496	11.29	594.3
262	3.0000	1452.0	.24030	.3490	.4059	.9345	.2250-01	.1332-01	1.509	11.32	592.1
262	3.0000	1453.0	.23670	.3420	.3967	.9345	.2200-01	.1312-01	1.503	11.01	590.8
262	4.0000	1454.0	.27440	.4020	.4698	.9345	.2604-01	.1521-01	1.690	12.45	594.2
262	4.0000	1455 0	.22380	.3248	.3776	.9345	.2093-01	.1241-01	1.407	10.63	591.9
262	4.0000	1456.0	.22420	.3224	.3730	.9345	.2068-01	.1243-01	1.439	10.45	589.5
262	5.0000	1457.0	.24200	.3498	.4059	.9345	.2250-01	.1342-01	1.535	11.52	590.9

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = .0000 BETA = -5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
252	.0000	-5.000	3.010	37.10	705.0	250.8	.9940	6.302	2336.	.3324-03	.2006-06	3.870

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
252	.5540-01	.9217-02

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
252	1.0000	1444.0	.16420	.2346	.2705	.9345	.1499-01	.9098-02	1.070	7.904	587.7
252	1.0000	1445.0	.15820	.2256	.2599	.9345	.1440-01	.8764-02	1.035	7.646	587.3
252	2.0000	1446.0	.16120	.2296	.2643	.9345	.1464-01	.8932-02	1.058	7.954	586.9
252	2.0000	1447.0	.14840	.2114	.2433	.9345	.1348-01	.8223-02	.9740	7.373	586.9
252	2.0000	1448.0	.14410	.2051	.2361	.9345	.1308-01	.7984-02	.9470	7.000	586.7
252	3.0000	1449.0	.17710	.2543	.2940	.9345	.1629-01	.9813-02	1.140	8.418	589.1
252	3.0000	1450.0	.14930	.2132	.2459	.9345	.1362-01	.8271-02	.9730	7.363	587.7
252	3.0000	1451.0	.14510	.2071	.2387	.9345	.1323-01	.8041-02	.9480	7.173	587.5
252	3.0000	1452.0	.14440	.2045	.2348	.9345	.1301-01	.7998-02	.9590	7.219	585.4
252	3.0000	1453.0	.14010	.1973	.2259	.9345	.1251-01	.7763-02	.9450	6.947	583.6
252	4.0000	1454.0	.17310	.2493	.2887	.9345	.1599-01	.9591-02	1.107	8.170	589.9
252	4.0000	1455.0	.14130	.2005	.2305	.9345	.1277-01	.7827-02	.9340	7.078	585.9
252	4.0000	1456.0	.13340	.1875	.2144	.9345	.1188-01	.7390-02	.9030	6.580	583.1
252	5.0000	1457.0	.15630	.2216	.2545	.9345	.1410-01	.8658-02	1.036	7.797	585.6

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
248	-.1000+00	.0000	3.010	37.10	705.0	250.6	.9960	6.314	2335.	.3334-03	.2004-06	3.883

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
248	.5545-01	.9202-02

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TH DEG. R
248	1.0000	1444.0	.20690	.2879	.3276	.9345	.1816-01	.1147-01	1.437	10.66	579.3
248	1.0000	1445.0	.19980	.2776	.3157	.9345	.1751-01	.1108-01	1.392	10.33	578.9
248	2.0000	1446.0	.20140	.2784	.3158	.9345	.1751-01	.1117-01	1.424	10.76	577.1
248	2.0000	1447.0	.18190	.2517	.2857	.9345	.1584-01	.1009-01	1.281	9.744	577.5
248	2.0000	1448.0	.17510	.2428	.2758	.9345	.1529-01	.9710-02	1.227	9.113	578.2
248	3.0000	1449.0	.21460	.2969	.3371	.9345	.1869-01	.1190-01	1.511	11.22	577.6
248	3.0000	1450.0	.19330	.2667	.3023	.9345	.1676-01	.1072-01	1.372	10.44	576.6
248	3.0000	1451.0	.18520	.2556	.2898	.9345	.1607-01	.1027-01	1.313	9.993	576.7
248	3.0000	1452.0	.17850	.2447	.2766	.9345	.1534-01	.9896-02	1.287	9.739	574.5
248	3.0000	1453.0	.17720	.2425	.2738	.9345	.1518-01	.9826-02	1.285	9.498	573.8
248	4.0000	1454.0	.21700	.3014	.3428	.9345	.1901-01	.1203-01	1.512	11.23	578.8
248	4.0000	1455.0	.17240	.2375	.2690	.9345	.1492-01	.9557-02	1.228	9.344	576.1
248	4.0000	1456.0	.17140	.2348	.2652	.9345	.1470-01	.9502-02	1.240	9.068	574.1
248	5.0000	1457.0	.19680	.2712	.3072	.9345	.1703-01	.1091-01	1.400	10.58	576.2

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = .0000 BETA = 5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
250	.0000	5.000	3.010	37.10	705.0	250.5	.9940	6.304	2335.	.3329-03	.2004-06	3.877

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
250	.5540-01	.9209-02

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
250	1.0000	1444.0	.22260	.3356	.3983	.9345	.2207-01	.1233-01	1.290	9.472	599.9
250	1.0000	1445.0	.22020	.3282	.3871	.9345	.2144-01	.1220-01	1.305	9.599	597.5
250	2.0000	1446.0	.21360	.3193	.3772	.9345	.2090-01	.1183-01	1.259	9.412	598.1
250	2.0000	1447.0	.19190	.2833	.3324	.9345	.1841-01	.1063-01	1.161	8.757	595.3
250	2.0000	1448.0	.18200	.2694	.3164	.9345	.1753-01	.1009-01	1.096	8.063	595.9
250	3.0000	1449.0	.22300	.3346	.3961	.9345	.2194-01	.1236-01	1.305	9.588	598.9
250	3.0000	1450.0	.18900	.2793	.3278	.9345	.1816-01	.1047-01	1.141	8.604	595.5
250	3.0000	1451.0	.18070	.2669	.3133	.9345	.1736-01	.1001-01	1.091	8.223	595.5
250	3.0000	1452.0	.17350	.2522	.2935	.9345	.1626-01	.9615-02	1.086	8.143	591.6
250	3.0000	1453.0	.17310	.2507	.2912	.9345	.1613-01	.9589-02	1.091	7.996	590.7
250	4.0000	1454.0	.21700	.3262	.3865	.9345	.2142-01	.1202-01	1.265	9.296	599.3
250	4.0000	1455.0	.17910	.2637	.3090	.9345	.1712-01	.9921-02	1.089	8.213	594.8
250	4.0000	1456.0	.16760	.2423	.2811	.9345	.1557-01	.9287-02	1.062	7.704	590.2
250	5.0000	1457.0	.19860	.2929	.3435	.9345	.1903-01	.1100-01	1.203	9.012	595.1

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = 5.000 BETA = -5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
258	4.990	-5.000	3.010	37.10	705.0	250.8	.9950	6.308	2336.	.3327-03	.2C07-06	3.873

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
258	.5543-01	.9213-02

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TH DEG. R
258	1.0000	1444.0	.13940	.1883	.2113	.9345	.1171-01	.7730-02	1.050	7.831	569.5
258	1.0000	1445.0	.12080	.1628	.1825	.9345	.1012-01	.6694-02	.9140	6.815	568.9
258	2.0000	1446.0	.13320	.1788	.2000	.9345	.1109-01	.7383-02	1.021	7.752	567.1
258	2.0000	1447.0	.12050	.1621	.1815	.9345	.1006-01	.6677-02	.9170	7.010	568.0
258	2.0000	1448.0	.11380	.1531	.1714	.9345	.9500-02	.6308-02	.8670	6.472	567.9
258	3.0000	1449.0	.14760	.1989	.2229	.9345	.1236-01	.8183-02	1.120	8.351	568.5
258	3.0000	1450.0	.12700	.1707	.1911	.9345	.1059-01	.7039-02	.9700	7.411	567.6
258	3.0000	1451.0	.12260	.1649	.1846	.9345	.1023-01	.6796-02	.9350	7.144	567.8
258	3.0000	1452.0	.11960	.1603	.1792	.9345	.9931-02	.6631-02	.9220	7.003	566.3
258	3.0000	1453.0	.11430	.1527	.1705	.9345	.9449-02	.6336-02	.8890	6.596	565.1
258	4.0000	1454.0	.14960	.2020	.2266	.9345	.1256-01	.8292-02	1.127	8.405	569.4
258	4.0000	1455.0	.12260	.1648	.1845	.9345	.1023-01	.6796-02	.9360	7.155	567.6
258	4.0000	1456.0	.11260	.1506	.1682	.9345	.9321-02	.6242-02	.8730	6.413	565.5
258	5.0000	1457.0	.14060	.1896	.2125	.9345	.1178-01	.7792-02	1.064	8.070	568.9

IH72, OTS CLEAN,RGT SRB FWD SEPART MOTOR HI/HREF

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = 5.000 BETA = .0000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
254	4.980	.0000	3.010	37.10	705.0	250.8	.9960	6.314	2336.	.3330-03	.2007-06	3.877

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
254	.5546-01	.9209-02

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
254	1.0000	1444.0	.16210	.2232	.2528	.9345	.1402-01	.8990-02	1.158	8.600	576.6
254	1.0000	1445.0	.15540	.2151	.2441	.9345	.1354-01	.8620-02	1.096	8.137	578.2
254	2.0000	1446.0	.15780	.2153	.2428	.9345	.1347-01	.8750-02	1.154	8.738	573.5
254	2.0000	1447.0	.13860	.1904	.2153	.9345	.1194-01	.7689-02	.9970	7.594	575.7
254	2.0000	1448.0	.13100	.1804	.2042	.9345	.1133-01	.7267-02	.9370	6.961	576.5
254	3.0000	1449.0	.16960	.2322	.2622	.9345	.1454-01	.9405-02	1.231	9.152	574.5
254	3.0000	1450.0	.14350	.1964	.2217	.9345	.1229-01	.7960-02	1.043	7.949	574.3
254	3.0000	1451.0	.13750	.1884	.2129	.9345	.1180-01	.7626-02	.9950	7.582	574.9
254	3.0000	1452.0	.13030	.1779	.2007	.9345	.1113-01	.7224-02	.9510	7.200	573.7
254	3.0000	1453.0	.13010	.1774	.1999	.9345	.1109-01	.7217-02	.9550	7.061	573.0
254	4.0000	1454.0	.16700	.2288	.2584	.9345	.1433-01	.9260-02	1.209	8.994	574.8
254	4.0000	1455.0	.13690	.1873	.2114	.9345	.1172-01	.7594-02	.9960	7.593	574.2
254	4.0000	1456.0	.12560	.1711	.1927	.9345	.1069-01	.6964-02	.9240	6.760	572.8
254	5.0000	1457.0	.15450	.2108	.2377	.9345	.1318-01	.8567-02	1.131	8.558	573.4

IH72, OTS CLEAN,RGT SRB FWD SEPART MOTOR HI/HREF (RVZM33)

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = 5.000 BETA = 5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
256	4.850	4.800	3.010	37.10	705.0	250.8	.9950	6.310	2336.	.3328-03	.2006-06	3.875

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
256	.5544-01	.9211-02

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
256	1.0000	1444.0	.19000	.2689	.3085	.9345	.1710-01	.1054-01	1.267	9.377	585.0
256	1.0000	1445.0	.14660	.2059	.2355	.9345	.1306-01	.8125-02	.9940	7.359	583.0
256	2.0000	1446.0	.18230	.2558	.2923	.9345	.1620-01	.1011-01	1.241	9.350	582.5
256	2.0000	1447.0	.16130	.2255	.2572	.9345	.1426-01	.8945-02	1.109	8.421	581.3
256	2.0000	1448.0	.15490	.2165	.2469	.9345	.1369-01	.8589-02	1.066	7.899	581.3
256	3.0000	1449.0	.19750	.2783	.3187	.9345	.1767-01	.1095-01	1.329	9.839	583.9
256	3.0000	1450.0	.16520	.2306	.2629	.9345	.1457-01	.9156-02	1.138	8.640	581.0
256	3.0000	1451.0	.15690	.2187	.2492	.9345	.1382-01	.8699-02	1.085	8.241	580.6
256	3.0000	1452.0	.15470	.2148	.2442	.9345	.1354-01	.8577-02	1.081	8.159	579.3
256	3.0000	1453.0	.14860	.2049	.2322	.9345	.1287-01	.8239-02	1.058	7.803	577.0
256	4.0000	1454.0	.19630	.2768	.3172	.9345	.1758-01	.1088-01	1.320	9.767	584.1
256	4.0000	1455.0	.15900	.2211	.2515	.9345	.1394-01	.8815-02	1.107	8.412	579.7
256	4.0000	1456.0	.14530	.2002	.2267	.9345	.1257-01	.8055-02	1.037	7.573	576.6
256	5.0000	1457.0	.17630	.2463	.2810	.9345	.1558-01	.9773-02	1.212	9.137	581.3

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = -5.000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
272	-5.030	-9.000	4.020	72.90	741.0	175.1	.4680	5.291	2607.	.2241-03	.1410-06	4.143

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
272	.5115-01	.1131-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
272	1.0000	1444.0	.17280	.2259	.2729	.9220	.1396-01	.8838-02	1.392	10.31	583.6
272	1.0000	1445.0	.18190	.2393	.2907	.9220	.1487-01	.9307-02	1.438	10.63	586.6
272	2.0000	1446.0	.17810	.2327	.2808	.9220	.1436-01	.9111-02	1.440	10.85	583.1
272	2.0000	1447.0	.17050	.2239	.2716	.9220	.1389-01	.8722-02	1.355	10.26	585.8
272	2.0000	1448.0	.16480	.2179	.2658	.9220	.1359-01	.8432-02	1.284	9.479	588.9
272	3.0000	1449.0	.20540	.2700	.3277	.9220	.1676-01	.1051-01	1.627	12.03	586.2
272	3.0000	1450.0	.18210	.2396	.2911	.9220	.1489-01	.9317-02	1.439	10.89	586.7
272	3.0000	1451.0	.17600	.2319	.2821	.9220	.1443-01	.9004-02	1.384	10.48	587.4
272	3.0000	1452.0	.17930	.2354	.2855	.9220	.1460-01	.9170-02	1.425	10.72	585.8
272	3.0000	1453.0	.17630	.2311	.2797	.9220	.1431-01	.9020-02	1.411	10.37	584.7
272	4.0000	1454.0	.19620	.2581	.3136	.9220	.1604-01	.1004-01	1.549	11.45	586.7
272	4.0000	1455.0	.16710	.2197	.2668	.9220	.1365-01	.8546-02	1.322	10.01	586.5
272	4.0000	1456.0	.16590	.2175	.2633	.9220	.1347-01	.8487-02	1.327	9.654	584.8
272	5.0000	1457.0	.16970	.2220	.2683	.9220	.1373-01	.8678-02	1.364	10.27	583.9

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = .0000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
268	-.1000-01	-8.900	4.020	72.90	749.0	177.0	.4680	5.291	2621.	.2216-03	.1425-06	4.076

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
268	.5123-01	.1139-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
268	1.0000	1444.0	.11440	.1465	.1738	.9220	.8904-02	.5860-02	1.002	7.435	578.4
268	1.0000	1445.0	.11070	.1429	.1706	.9220	.8738-02	.5672-02	.9450	6.998	582.7
268	2.0000	1446.0	.12290	.1584	.1890	.9220	.9683-02	.6295-02	1.051	7.923	582.3
268	2.0000	1447.0	.11100	.1438	.1722	.9220	.8824-02	.5688-02	.9360	7.091	584.8
268	2.0000	1448.0	.11370	.1484	.1790	.3220	.9169-02	.5825-02	.9330	6.891	589.1
268	3.0000	1449.0	.14570	.1903	.2297	.9220	.1177-01	.7465-02	1.193	8.810	589.4
268	3.0000	1450.0	.12700	.1660	.2004	.9220	.1027-01	.6508-02	1.039	7.856	589.6
268	3.0000	1451.0	.11980	.1567	.1893	.9220	.9700-02	.6138-02	.9770	7.386	590.1
268	3.0000	1452.0	.11920	.1555	.1876	.9220	.9611-02	.6104-02	.9780	7.343	589.1
268	3.0000	1453.0	.11230	.1463	.1761	.9220	.9022-02	.5751-02	.9270	6.801	588.1
268	4.0000	1454.0	.13870	.1818	.2201	.9220	.1127-01	.7106-02	1.123	8.287	591.2
268	4.0000	1455.0	.11630	.1518	.1831	.9220	.9381-02	.5958-02	.9550	7.219	589.1
268	4.0000	1456.0	.10690	.1393	.1679	.9220	.8601-02	.5474-02	.8800	6.392	588.5
268	5.0000	1457.0	.12050	.1572	.1895	.9220	.9706-02	.6171-02	.9900	7.439	588.8

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
266	-.1200	.0000	4.020	73.00	746.0	176.3	.4680	5.293	2616.	.2227-03	.1420-06	4.102

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
266	.5121-01	.1136-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
266	1.0000	1444.0	.19670	.2534	.3021	.9220	.1547-01	.1007-01	1.680	12.46	579.4
266	1.0000	1445.0	.18660	.2410	.2880	.9220	.1475-01	.9556-02	1.579	11.71	580.9
266	2.0000	1446.0	.19530	.2509	.2986	.9220	.1529-01	.1000-01	1.682	12.71	578.0
266	2.0000	1447.0	.18220	.2353	.2811	.9220	.1439-01	.9332-02	1.544	11.73	580.7
266	2.0000	1448.0	.17420	.2253	.2696	.9220	.1380-01	.8921-02	1.468	10.88	581.7
266	3.0000	1449.0	.21980	.2836	.3387	.9220	.1734-01	.1126-01	1.867	13.85	580.3
266	3.0000	1450.0	.19520	.2518	.3006	.9220	.1539-01	.9998-02	1.661	12.62	580.1
266	3.0000	1451.0	.18790	.2425	.2896	.9220	.1483-01	.9620-02	1.594	12.11	580.5
266	3.0000	1452.0	.18540	.2384	.2839	.9220	.1454-01	.9495-02	1.593	12.03	578.4
266	3.0000	1453.0	.17900	.2298	.2732	.9220	.1399-01	.9169-02	1.548	11.42	577.4
266	4.0000	1454.0	.21870	.2831	.3389	.9220	.1735-01	.1120-01	1.838	13.62	582.1
266	4.0000	1455.0	.18290	.2361	.2820	.9220	.1444-01	.9368-02	1.552	11.79	580.5
266	4.0000	1456.0	.17210	.2211	.2630	.9220	.1347-01	.8812-02	1.483	10.83	577.9
266	5.0000	1457.0	.19640	.2531	.3019	.9220	.1546-01	.1006-01	1.676	12.65	579.6

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = 5.000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
270	4.990	-9.000	4.020	72.80	742.0	175.4	.4670	5.284	2609.	.2235-03	.1412-06	4.128

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
270	.5113-01	.1133-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TH DEG. R
270	1.0000	1444.0	.79800-01	.9920-01	.1149	.9220	.5874-02	.4083-02	.7750	5.829	552.4
270	1.0000	1445.0	.83600-01	.1038	.1201	.9220	.6141-02	.4276-02	.8150	6.130	551.7
270	2.0000	1446.0	.85600-01	.1067	.1238	.9220	.6329-02	.4377-02	.8220	6.279	554.6
270	2.0000	1447.0	.75000-01	.9330-01	.1082	.9220	.5532-02	.3833-02	.7230	5.563	553.8
270	2.0000	1448.0	.66300-01	.8220-01	.9490-01	.9220	.4851-02	.3391-02	.6520	4.913	549.9
270	3.0000	1449.0	.98000-01	.1229	.1432	.9220	.7320-02	.5013-02	.9210	6.904	558.6
270	3.0000	1450.0	.78500-01	.9780-01	.1134	.9220	.5800-02	.4013-02	.7540	5.804	554.3
270	3.0000	1451.0	.73600-01	.9160-01	.1062	.9220	.5430-02	.3761-02	.7090	5.454	553.9
270	3.0000	1452.0	.70300-01	.8720-01	.1009	.9220	.5159-02	.3592-02	.6850	5.240	551.7
270	3.0000	1453.0	.64600-01	.8010-01	.9250-01	.9220	.4729-02	.3305-02	.6350	4.750	550.1
270	4.0000	1454.0	.10150	.1274	.1486	.9220	.7597-02	.5192-02	.9490	7.113	559.4
270	4.0000	1455.0	.80900-01	.1010	.1174	.9220	.6002-02	.4134-02	.7690	5.912	556.3
270	4.0000	1456.0	.65700-01	.8150-01	.9420-01	.9220	.4816-02	.3358-02	.6420	4.753	551.0
270	5.0000	1457.0	.94900-01	.1195	.1399	.9220	.7152-02	.4851-02	.8730	6.643	562.3

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
145	-.2000-01	.0000	3.010	37.10	706.0	250.9	.9950	6.311	2336.	.3327-03	.2007-06	3.872

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
145	.5544-01	.9214-02

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
145	1.0000	1444.0	.24290	.3461	.3986	.9345	.2210-01	.1347-01	1.593	11.78	587.3
145	1.0000	1445.0	.23240	.3381	.3936	.9345	.2182-01	.1288-01	1.454	10.72	592.8
145	2.0000	1446.0	.24020	.3414	.3928	.9345	.2178-01	.1332-01	1.584	11.91	586.7
145	2.0000	1461.0	.93900-01	.2955	.8830	.9345	.4896-01	.5208-02	.2690	3.344	653.9
145	2.0000	1447.0	.23710	.3714	.4506	.9345	.2498-01	.1315-01	1.283	9.611	608.1
145	2.0000	1462.0	.16730	.4123	.7548	.9345	.4185-01	.9277-02	.5510	6.484	646.3
145	2.0000	1448.0	.23470	.3595	.4305	.9345	.2387-01	.1301-01	1.322	9.689	604.0
145	3.0000	1449.0	.25470	.3626	.4173	.9345	.2314-01	.1412-01	1.675	12.38	587.1
145	3.0000	1450.0	.26660	.4225	.5159	.9345	.2861-01	.1478-01	1.414	10.59	610.0
145	3.0000	1451.0	.27000	.4352	.5371	.9345	.2978-01	.1497-01	1.392	10.40	612.7
145	3.0000	1452.0	.25630	.4102	.5040	.9345	.2795-01	.1421-01	1.336	9.926	611.6
145	3.0000	1453.0	.25120	.3730	.4389	.9345	.2434-01	.1393-01	1.505	10.99	597.6
145	4.0000	1454.0	.23490	.3362	.3881	.9345	.2152-01	.1302-01	1.525	11.26	588.5
145	4.0000	1459.0	.88700-01	.1334	.1580	.9345	.8763-02	.4920-02	.5190	6.609	600.2
145	4.0000	1455.0	.23220	.3712	.4558	.9345	.2527-01	.1288-01	1.213	9.077	611.4
145	4.0000	1460.0	.16160	.3517	.5534	.9345	.3068-01	.8961-02	.5850	6.905	640.4
145	4.0000	1456.0	.24180	.3627	.4293	.9345	.2380-01	.1340-01	1.418	10.24	599.8
145	5.0000	1457.0	.22790	.3272	.3782	.9345	.2097-01	.1264-01	1.470	11.04	589.3
145	5.0000	1458.0	.24310	.3578	.4190	.9345	.2323-01	.1348-01	1.483	10.92	595.6

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
143	-.1000-01	.0000	4.020	72.40	751.0	177.5	.4650	5.256	2624.	.2196-03	.1429-06	4.033

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
143	.5107-01	.1144-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
143	1.0000	1444.0	.20400	.2616	.3108	.9220	.1587-01	.1042-01	1.776	13.17	580.6
143	1.0000	1445.0	.22080	.2878	.3466	.9220	.1770-01	.1128-01	1.822	13.45	589.6
143	2.0000	1446.0	.18960	.2424	.2873	.9220	.1467-01	.9684-02	1.669	12.60	578.8
143	2.0000	1447.0	.22970	.3123	.3911	.9220	.1997-01	.1173-01	1.665	12.47	609.2
143	2.0000	1462.0	.16760	.2744	.4270	.9220	.2181-01	.8558-02	.8250	9.674	654.7
143	2.0000	1448.0	.20210	.2682	.3284	.9220	.1677-01	.1032-01	1.572	11.55	598.8
143	3.0000	1449.0	.18630	.2371	.2798	.9220	.1429-01	.9515-02	1.669	12.40	575.7
143	3.0000	1450.0	.23780	.3243	.4072	.9220	.2080-01	.1214-01	1.710	12.80	610.3
143	3.0000	1451.0	.26190	.3626	.4621	.9220	.2360-01	.1338-01	1.809	13.50	615.9
143	3.0000	1452.0	.24780	.3405	.4308	.9220	.2200-01	.1265-01	1.745	12.95	613.2
143	3.0000	1453.0	.22770	.2983	.3611	.9220	.1844-01	.1163-01	1.843	13.50	592.6
143	4.0000	1454.0	.19110	.2454	.2918	.9220	.1490-01	.9762-02	1.658	12.29	581.3
143	4.0000	1459.0	.97000-01	.1312	.1635	.9220	.8349-02	.4952-02	.7130	9.058	607.1
143	4.0000	1455.0	.23340	.3209	.4062	.9220	.2074-01	.1192-01	1.641	12.26	613.4
143	4.0000	1460.0	.16900	.2608	.3748	.9220	.1914-01	.8633-02	.9210	10.85	644.4
143	4.0000	1456.0	.22050	.2899	.3518	.9220	.1797-01	.1126-01	1.767	12.80	594.2
143	5.0000	1457.0	.19870	.2566	.3066	.9220	.1566-01	.1015-01	1.688	12.71	584.7
143	5.0000	1458.0	.21890	.2864	.3461	.9220	.1768-01	.1118-01	1.782	13.14	591.7

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = -5.000 BETA = -5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
163	-5.050	-5.000	3.010	37.00	710.0	252.6	.9930	6.300	2344.	.3299-03	.2020-06	3.829

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
163	.5545-01	.9261-02

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
163	1.0000	1444.0	.24000	.3285	.3710	.9345	.2057-01	.1331-01	1.753	13.01	578.6
163	1.0000	1445.0	.23570	.3235	.3658	.9345	.2028-01	.1307-01	1.709	12.68	579.6
163	2.0000	1446.0	.23290	.3164	.3560	.9345	.1974-01	.1291-01	1.736	13.13	575.9
163	2.0000	1447.0	.22860	.3148	.3565	.9345	.1977-01	.1267-01	1.644	12.48	580.7
163	2.0000	1448.0	.23130	.3194	.3621	.9345	.2008-01	.1282-01	1.651	12.24	581.6
163	3.0000	1443.0	.25670	.3529	.3994	.9345	.2214-01	.1423-01	1.854	13.75	580.1
163	3.0000	1450.0	.24110	.3331	.3777	.9345	.2094-01	.1337-01	1.720	13.06	581.7
163	3.0000	1451.0	.24100	.3348	.3808	.9345	.2111-01	.1336-01	1.693	12.84	583.6
163	3.0000	1452.0	.24840	.3437	.3902	.9345	.2163-01	.1377-01	1.764	13.29	582.3
163	3.0000	1453.0	.24020	.3299	.3731	.9345	.2069-01	.1332-01	1.741	12.83	579.7
163	4.0000	1454.0	.26170	.3618	.4104	.9345	.2276-01	.1451-01	1.864	13.82	581.9
163	4.0000	1455.0	.22750	.3135	.3552	.9345	.1970-01	.1261-01	1.632	12.39	581.0
163	4.0000	1456.0	.23420	.3225	.3651	.9345	.2025-01	.1299-01	1.686	12.29	580.6
163	5.0000	1457.0	.25560	.3541	.4021	.9345	.2230-01	.1417-01	1.810	13.64	582.6
163	5.0000	1458.0	.31480	.4371	.4969	.9345	.2755-01	.1746-01	2.217	16.42	583.4

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = -5.000 BETA = .0000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
159	-5.030	.0000	3.010	37.00	710.0	252.5	.9920	6.294	2344.	.3298-03	.2019-06	3.828

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
159	.5542-01	.9262-02

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
159	1.0000	1444.0	.24130	.3442	.3967	.9345	.2199-01	.1337-01	1.587	11.70	591.4
159	1.0000	1445.0	.23100	.3310	.3823	.9345	.2119-01	.1280-01	1.504	11.08	592.5
159	2.0000	1446.0	.22150	.3113	.3561	.9345	.1973-01	.1228-01	1.511	11.36	587.0
159	2.0000	1447.0	.21160	.3024	.3488	.9345	.1933-01	.1172-01	1.386	10.47	591.8
159	2.0000	1448.0	.20830	.2987	.3451	.9345	.1913-01	.1154-01	1.354	9.982	592.7
159	3.0000	1449.0	.22530	.3179	.3643	.9345	.2019-01	.1249-01	1.522	11.25	588.1
159	3.0000	1450.0	.21160	.3006	.3456	.9345	.1915-01	.1173-01	1.407	10.64	590.0
159	3.0000	1451.0	.21090	.3019	.3485	.9345	.1931-01	.1169-01	1.377	10.39	592.2
159	3.0000	1452.0	.20320	.2906	.3354	.9345	.1859-01	.1126-01	1.328	9.961	592.1
159	3.0000	1453.0	.20930	.2969	.3413	.9345	.1891-01	.1160-01	1.394	10.22	589.8
159	4.0000	1454.0	.22120	.3117	.3571	.9345	.1979-01	.1226-01	1.498	11.07	587.8
159	4.0000	1455.0	.19660	.2775	.3180	.9345	.1763-01	.1090-01	1.327	10.04	588.2
159	4.0000	1456.0	.20260	.2864	.3286	.9345	.1821-01	.1123-01	1.361	9.887	588.7
159	5.0000	1457.0	.20570	.2898	.3320	.9345	.1840-01	.1140-01	1.393	10.47	587.8
159	5.0000	1458.0	.21340	.3018	.3462	.9345	.1919-01	.1183-01	1.434	10.59	588.8

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = -5.000 BETA = 5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
161	-5.050	5.000	3.010	37.00	710.0	252.6	.9930	6.296	2344.	.3297-03	.2020-06	3.827

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
161	.5543-01	.9263-02

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
161	1.0000	1444.0	.24080	.3481	.4039	.9345	.2239-01	.1335-01	1.538	11.32	595.1
161	1.0000	1445.0	.23720	.3439	.3995	.9345	.2215-01	.1315-01	1.505	11.08	595.8
161	2.0000	1446.0	.21570	.3043	.3487	.9345	.1933-01	.1196-01	1.458	10.96	588.3
161	2.0000	1447.0	.20390	.2928	.3385	.9345	.1876-01	.1130-01	1.323	9.985	593.3
161	2.0000	1448.0	.18900	.2705	.3122	.9345	.1731-01	.1047-01	1.234	9.099	592.5
161	3.0000	1449.0	.20950	.2937	.3355	.9345	.1860-01	.1161-01	1.439	10.64	586.4
161	3.0000	1450.0	.18940	.2671	.3061	.9345	.1697-01	.1050-01	1.281	9.691	588.3
161	3.0000	1451.0	.18900	.2682	.3082	.9345	.1708-01	.1048-01	1.261	9.535	590.0
161	3.0000	1452.0	.19080	.2709	.3114	.9345	.1726-01	.1057-01	1.270	9.535	590.2
161	3.0000	1453.0	.18540	.2609	.2986	.9345	.1655-01	.1028-01	1.261	9.256	587.6
161	4.0000	1454.0	.19460	.2706	.3078	.9345	.1706-01	.1079-01	1.365	10.10	583.8
161	4.0000	1455.0	.17110	.2383	.2714	.9345	.1504-01	.9484-02	1.194	9.050	584.4
161	4.0000	1456.0	.17180	.2403	.2742	.9345	.1520-01	.9525-02	1.187	8.633	585.7
161	5.0000	1457.0	.17070	.2363	.2683	.9345	.1487-01	.9463-02	1.210	9.122	582.4
161	5.0000	1458.0	.13940	.1938	.2205	.9345	.1222-01	.7727-02	.9770	7.236	583.8

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = .0000 BETA = -5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
151	.0000	-5.000	3.010	37.00	710.0	252.4	.9930	6.297	2343.	.3301-03	.2018-06	3.832

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
151	.5543-01	.9257-02

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
151	1.0000	1444.0	.17210	.2536	.2973	.9345	.1648-01	.9538-02	1.053	7.733	599.3
151	1.0000	1445.0	.15880	.2359	.2778	.9345	.1540-01	.8801-02	.9550	7.009	601.2
151	2.0000	1446.0	.16660	.2436	.2844	.9345	.1576-01	.9234-02	1.036	7.751	597.5
151	2.0000	1447.0	.15450	.2304	.2719	.9345	.1507-01	.8562-02	.9220	6.928	602.0
151	2.0000	1448.0	.14610	.2191	.2593	.9345	.1437-01	.8097-02	.8620	6.320	603.2
151	3.0000	1449.0	.18270	.2740	.3244	.9345	.1798-01	.1013-01	1.077	7.900	603.3
151	3.0000	1450.0	.16120	.2429	.2881	.9345	.1597-01	.8934-02	.9430	7.076	604.2
151	3.0000	1451.0	.16240	.2466	.2938	.9345	.1628-01	.9003-02	.9360	7.020	605.7
151	3.0000	1452.0	.16280	.2464	.2932	.9345	.1625-01	.9022-02	.9430	7.025	605.2
151	3.0000	1453.0	.15830	.2374	.2808	.9345	.1557-01	.8776-02	.9350	6.810	603.1
151	4.0000	1454.0	.18540	.2839	.3398	.9345	.1883-01	.1028-01	1.051	7.694	607.4
151	4.0000	1455.0	.16610	.2534	.3029	.9345	.1679-01	.9204-02	.9470	7.102	606.8
151	4.0000	1456.0	.15550	.2359	.2809	.9345	.1557-01	.8618-02	.8970	6.463	605.6
151	5.0000	1457.0	.18450	.2871	.3469	.9345	.1923-01	.1023-01	1.015	7.545	610.4
151	5.0000	1458.0	.18970	.2966	.3594	.9345	.1992-01	.1051-01	1.034	7.556	611.3

IH72, RGT SRB CLEAN, FWD SEPART MOTOR HU/HREF (RVZM53)

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 3.010

•••TEST CONDITIONS•••

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
147	-.3000-01	.0000	3.010	37.00	709.0	252.2	.9910	6.288	2342.	.3298-03	.2017-06	3.830

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
147	.5538-01	.9261-02

•••TEST DATA•••

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
147	1.0000	1444.0	.18760	.2588	.2933	.9345	.1625-01	.1039-01	1.340	9.937	580.4
147	1.0000	1445.0	.19010	.2661	.3037	.9345	.1682-01	.1053-01	1.308	9.677	585.1
147	2.0000	1446.0	.17170	.2312	.2590	.9345	.1435-01	.9511-02	1.311	9.933	571.5
147	2.0000	1447.0	.16720	.2316	.2631	.9345	.1457-01	.9258-02	1.180	8.954	581.9
147	2.0000	1448.0	.17280	.2419	.2762	.9345	.1530-01	.9572-02	1.188	8.792	585.2
147	3.0000	1449.0	.18200	.2478	.2791	.9345	.1546-01	.1008-01	1.347	10.01	575.7
147	3.0000	1450.0	.16340	.2247	.2544	.9345	.1409-01	.9047-02	1.175	8.929	579.5
147	3.0000	1451.0	.16940	.2352	.2674	.9345	.1481-01	.9382-02	1.189	9.022	582.6
147	3.0000	1452.0	.17700	.2463	.2803	.9345	.1553-01	.9806-02	1.236	9.314	583.2
147	3.0000	1453.0	.16830	.2340	.2662	.9345	.1474-01	.9323-02	1.178	8.669	582.9
147	4.0000	1454.0	.19010	.2614	.2958	.9345	.1638-01	.1053-01	1.368	10.15	579.3
147	4.0000	1455.0	.16400	.2267	.2572	.9345	.1424-01	.9085-02	1.165	8.848	581.0
147	4.0000	1456.0	.16290	.2260	.2568	.9345	.1422-01	.9023-02	1.147	8.354	582.2
147	5.0000	1457.0	.18570	.2569	.2915	.9345	.1615-01	.1028-01	1.316	9.921	581.4
147	5.0000	1458.0	.18830	.2621	.2983	.9345	.1652-01	.1043-01	1.313	9.722	583.4

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = .0000 BETA = 5.000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
149	.0000	5.000	3.010	37.00	709.0	252.3	.9920	6.290	2343.	.3298-03	.2017-06	3.830

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
149	.5540-01	.9260-02

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
149	1.0000	1444.0	.20190	.2904	.3360	.9345	.1861-01	.1118-01	1.302	9.594	593.0
149	1.0000	1445.0	.18860	.2716	.3145	.9345	.1742-01	.1045-01	1.212	8.932	593.4
149	2.0000	1446.0	.18050	.2523	.2878	.9345	.1594-01	.9996-02	1.246	9.376	584.8
149	2.0000	1447.0	.17400	.2477	.2852	.9345	.1580-01	.9638-02	1.148	8.681	590.3
149	2.0000	1448.0	.15780	.2240	.2574	.9345	.1426-01	.8741-02	1.049	7.748	589.4
149	3.0000	1449.0	.18140	.2512	.2852	.9345	.1580-01	.1005-01	1.283	9.507	581.8
149	3.0000	1450.0	.16170	.2251	.2563	.9345	.1420-01	.8955-02	1.127	8.548	583.6
149	3.0000	1451.0	.16150	.2263	.2584	.9345	.1431-01	.8945-02	1.108	8.394	585.6
149	3.0000	1452.0	.16670	.2340	.2674	.9345	.1482-01	.9236-02	1.140	8.572	586.0
149	3.0000	1453.0	.15630	.2183	.2489	.9345	.1379-01	.8659-02	1.081	7.948	584.5
149	4.0000	1454.0	.17130	.2357	.2668	.9345	.1478-01	.9491-02	1.232	9.142	579.6
149	4.0000	1455.0	.15000	.2079	.2362	.9345	.1308-01	.8307-02	1.057	8.025	582.1
149	4.0000	1456.0	.14960	.2075	.2358	.9345	.1306-01	.8290-02	1.054	7.679	582.3
149	5.0000	1457.0	.15880	.2178	.2462	.9345	.1364-01	.8794-02	1.151	8.689	578.6
149	5.0000	1458.0	.15720	.2163	.2449	.9345	.1357-01	.8707-02	1.130	8.380	579.7

IH72, RGT SRB CLEAN, FWD SEPART MOTOR HU/HREF (RVZM55)

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = 5.000 BETA = -5.000 IH NO = 72.00 MACH = 3.010

•••TEST CONDITIONS•••

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
157	5.030	-5.000	3.010	37.00	710.0	252.5	.9920	6.289	2344.	.3295-03	.2019-06	3.825

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
157	.5540-01	.9266-02

•••TEST DATA•••

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
157	1.0000	1444.0	.14920	.2077	.2364	.9345	.1310-01	.8264-02	1.042	7.712	583.9
157	1.0000	1445.0	.13720	.1924	.2198	.9345	.1218-01	.7602-02	.9410	6.958	586.2
157	2.0000	1446.0	.14620	.2017	.2285	.9345	.1266-01	.8101-02	1.046	7.890	580.8
157	2.0000	1447.0	.13860	.1952	.2234	.9345	.1238-01	.7680-02	.9410	7.125	587.4
157	2.0000	1448.0	.13120	.1853	.2125	.9345	.1177-01	.7267-02	.8840	6.526	588.4
157	3.0000	1449.0	.16810	.2346	.2675	.9345	.1482-01	.9311-02	1.165	8.621	584.8
157	3.0000	1450.0	.14870	.2096	.2401	.9345	.1330-01	.8235-02	1.005	7.608	587.9
157	3.0000	1451.0	.14630	.2077	.2387	.9345	.1322-01	.8105-02	.9740	7.360	589.9
157	3.0000	1452.0	.14570	.2061	.2366	.9345	.1311-01	.8071-02	.9770	7.340	588.9
157	3.0000	1453.0	.13920	.1962	.2248	.9345	.1245-01	.7713-02	.9420	6.916	587.8
157	4.0000	1454.0	.16870	.2404	.2770	.9345	.1534-01	.9344-02	1.111	8.197	591.1
157	4.0000	1455.0	.16020	.2305	.2668	.9345	.1478-01	.8877-02	1.033	7.799	593.6
157	4.0000	1456.0	.14670	.2037	.2419	.9345	.1340-01	.8124-02	.9590	6.956	591.9
157	5.0000	1457.0	.17630	.2562	.2980	.9345	.1651-01	.9767-02	1.112	8.327	596.1
157	5.0000	1458.0	.17250	.2516	.2932	.9345	.1624-01	.9558-02	1.080	7.946	597.0

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = 5.000 BETA = .0000 IH NO = 72.00 MACH = 3.010

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
153	4.970	.0000	3.010	37.00	710.0	252.4	.9920	6.289	2343.	.3296-03	.2018-06	3.827

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
153	.5539-01	.9264-02

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TH DEG. R
153	1.0000	1444.0	.16630	.2275	.2568	.9345	.1423-01	.9214-02	1.215	9.024	577.9
153	1.0000	1445.0	.15270	.2106	.2386	.9345	.1322-01	.8460-02	1.093	8.101	580.6
153	2.0000	1446.0	.14910	.2016	.2263	.9345	.1253-01	.8257-02	1.125	8.515	573.6
153	2.0000	1447.0	.14670	.2022	.2290	.9345	.1269-01	.8127-02	1.051	7.986	580.4
153	2.0000	1448.0	.12960	.1788	.2026	.9345	.1123-01	.7181-02	.9270	6.871	580.7
153	3.0000	1449.0	.15820	.2145	.2411	.9345	.1336-01	.8762-02	1.184	8.807	574.7
153	3.0000	1450.0	.13940	.1903	.2147	.9345	.1189-01	.7720-02	1.023	7.783	577.3
153	3.0000	1451.0	.14550	.2000	.2262	.9345	.1253-01	.8059-02	1.050	7.976	579.6
153	3.0000	1452.0	.14270	.1961	.2218	.9345	.1229-01	.7906-02	1.031	7.780	579.4
153	3.0000	1453.0	.13900	.1903	.2148	.9345	.1190-01	.7700-02	1.014	7.481	578.1
153	4.0000	1454.0	.15850	.2154	.2424	.9345	.1343-01	.8778-02	1.179	8.763	575.5
153	4.0000	1455.0	.15370	.2109	.2384	.9345	.1321-01	.8516-02	1.115	8.473	578.9
153	4.0000	1456.0	.14440	.1983	.2242	.9345	.1242-01	.7998-02	1.044	7.621	579.2
153	5.0000	1457.0	.16130	.2211	.2499	.9345	.1384-01	.8935-02	1.172	8.849	578.6
153	5.0000	1458.0	.15570	.2145	.2430	.9345	.1346-01	.8627-02	1.117	8.285	580.3

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = 5.000 BETA = 5.000 IH NO = 72.00 MACH = 3.010

•••TEST CONDITIONS•••

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
155	5.020	5.000	3.010	37.00	710.0	252.4	.9920	6.290	2343.	.3296-03	.2019-06	3.827

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
155	.5540-01	.9264-02

•••TEST DATA•••

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
155	1.0000	1444.0	.16830	.2310	.2612	.9345	.1447-01	.9325-02	1.220	9.051	579.0
155	1.0000	1445.0	.16400	.2266	.2570	.9345	.1424-01	.9085-02	1.167	8.649	581.4
155	2.0000	1446.0	.14950	.2020	.2267	.9345	.1256-01	.8285-02	1.132	8.568	573.2
155	2.0000	1447.0	.14770	.2040	.2313	.9345	.1281-01	.8185-02	1.054	8.000	581.1
155	2.0000	1448.0	.13210	.1824	.2069	.9345	.1146-01	.7317-02	.9410	6.974	581.3
155	3.0000	1449.0	.14140	.1915	.2152	.9345	.1192-01	.7835-02	1.063	7.906	574.2
155	3.0000	1450 0	.13800	.1882	.2121	.9345	.1175-01	.7647-02	1.018	7.747	576.7
155	3.0000	1451.0	.13980	.1919	.2170	.9345	.1202-01	.7745-02	1.012	7.691	579.2
155	3.0000	1452.0	.13770	.1894	.2144	.9345	.1188-01	.7627-02	.9910	7.478	579.9
155	3.0000	1453.0	.13100	.1793	.2025	.9345	.1122-01	.7255-02	.9550	7.040	578.2
155	4.0000	1454.0	.13230	.1794	.2016	.9345	.1117-01	.7331-02	.9920	7.380	574.5
155	4.0000	1455.0	.13180	.1802	.2034	.9345	.1127-01	.7302-02	.9650	7.338	577.7
155	4.0000	1456.0	.13010	.1781	.2010	.9345	.1114-01	.7210-02	.9510	6.940	578.0
155	5.0000	1457.0	.13560	.1848	.2082	.9345	.1153-01	.7515-02	1.003	7.578	576.4
155	5.0000	1458.0	.13490	.1842	.2078	.9345	.1151-01	.7472-02	.9900	7.353	577.3

IH72, RGT SRB CLEAN, FWD SEPART MOTOR HU/HREF (RVZM58)

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = -5.000 BETA = -5.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
181	-5.040	-5.000	4.020	73.00	748.0	176.8	.4680	5.293	2619.	.2221-03	.1423-06	4.087

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
181	.5123-01	.1138-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
181	1.0000	1444.0	.22420	.2885	.3437	.9220	.1760-01	.1149-01	1.928	14.30	580.2
181	1.0000	1445.0	.23700	.3063	.3664	.9220	.1877-01	.1214-01	2.006	14.85	582.9
181	2.0000	1446.0	.21690	.2771	.3282	.9220	.1681-01	.1111-01	1.912	14.45	576.0
181	2.0000	1447.0	.22170	.2867	.3431	.9220	.1758-01	.1135-01	1.872	14.20	583.3
181	2.0000	1448.0	.22900	.2970	.3563	.9220	.1825-01	.1173-01	1.917	14.19	584.7
181	3.0000	1449.0	.24430	.3137	.3730	.9220	.1911-01	.1251-01	2.117	15.71	578.9
181	3.0000	1450.0	.23160	.2987	.3566	.9220	.1827-01	.1187-01	1.977	15.00	581.5
181	3.0000	1451.0	.24270	.3143	.3765	.9220	.1929-01	.1243-01	2.042	15.49	583.8
181	3.0000	1452.0	.24030	.3106	.3716	.9220	.1904-01	.1231-01	2.032	15.30	583.0
181	3.0000	1453.0	.24170	.3117	.3720	.9220	.1906-01	.1238-01	2.061	15.17	581.6
181	4.0000	1454.0	.25080	.3229	.3850	.9220	.1972-01	.1285-01	2.150	15.94	580.7
181	4.0000	1455.0	.23550	.3047	.3647	.9220	.1868-01	.1206-01	1.987	15.07	583.4
181	4.0000	1456.0	.23960	.3096	.3702	.9220	.1896-01	.1227-01	2.029	14.78	582.7
181	5.0000	1457.0	.25040	.3237	.3872	.9220	.1983-01	.1283-01	2.119	15.97	582.9
181	5.0000	1458.0	.25590	.3316	.3973	.9220	.2035-01	.1311-01	2.150	15.91	584.1

IH72, RGT SRB CLEAN, FWD SEPART MOTOR HU/HREF (RVZM59)

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = -5.000 BETA = .0000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
177	-5.030	.0000	4.020	72.90	747.0	176.6	.4670	5.287	2618.	.2221-03	.1422-06	4.089

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
177	.5119-01	.1137-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
177	1.0000	1444.0	.23010	.3008	.3632	.9220	.1859-01	.1176-01	1.873	13.84	588.2
177	1.0000	1445.0	.22280	.2929	.3555	.9220	.1820-01	.1140-01	1.781	13.13	591.2
177	2.0000	1446.0	.21180	.2742	.3284	.9220	.1681-01	.1084-01	1.780	13.41	583.1
177	2.0000	1447.0	.22160	.2905	.3518	.9220	.1801-01	.1134-01	1.786	13.50	589.9
177	2.0000	1448.0	.20790	.2737	.3327	.9220	.1703-01	.1064-01	1.654	12.19	591.9
177	3.0000	1449.0	.21890	.2842	.3413	.9220	.1747-01	.1120-01	1.821	13.48	584.7
177	3.0000	1450.0	.20890	.2725	.3285	.9220	.1682-01	.1069-01	1.711	12.95	587.3
177	3.0000	1451.0	.21130	.2770	.3355	.9220	.1717-01	.1082-01	1.703	12.88	589.8
177	3.0000	1452.0	.21290	.2792	.3382	.9220	.1731-01	.1090-01	1.715	12.87	590.0
177	3.0000	1453.0	.21270	.2782	.3362	.9220	.1721-01	.1089-01	1.728	12.68	588.6
177	4.0000	1454.0	.21160	.2746	.3296	.9220	.1687-01	.1083-01	1.763	13.04	584.5
177	4.0000	1455.0	.19350	.2526	.3047	.9220	.1560-01	.9905-02	1.582	11.98	587.6
177	4.0000	1456.0	.20460	.2675	.3231	.9220	.1654-01	.1047-01	1.664	12.09	588.4
177	5.0000	1457.0	.19680	.2556	.3070	.9220	.1571-01	.1007-01	1.636	12.32	584.9
177	5.0000	1458.0	.20010	.2608	.3142	.9220	.1608-01	.1024-01	1.644	12.16	586.7

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = -5.000 BETA = 5.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
179	-5.050	5.000	4.020	72.90	748.0	176.7	.4670	5.286	2618.	.2219-03	.1423-06	4.084

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
179	.5119-01	.1138-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
179	1.0000	1444.0	.23400	.3107	.3805	.9220	.1948-01	.1198-01	1.815	13.35	596.4
179	1.0000	1445.0	.23030	.3074	.3783	.9220	.1937-01	.1179-01	1.757	12.91	598.8
179	2.0000	1446.0	.20230	.2645	.3194	.9220	.1635-01	.1036-01	1.647	12.37	588.8
179	2.0000	1447.0	.19960	.2656	.3259	.9220	.1668-01	.1022-01	1.537	11.58	597.4
179	2.0000	1448.0	.19460	.2588	.3174	.9220	.1625-01	.9963-02	1.502	11.05	597.1
179	3.0000	1449.0	.19270	.2510	.3022	.9220	.1547-01	.9866-02	1.589	11.75	586.8
179	3.0000	1450.0	.18280	.2394	.2897	.9220	.1483-01	.9357-02	1.478	11.18	589.8
179	3.0000	1451.0	.18460	.2432	.2957	.9220	.1513-01	.9451-02	1.468	11.09	592.5
179	3.0000	1452.0	.18550	.2446	.2977	.9220	.1524-01	.9499-02	1.471	11.02	593.0
179	3.0000	1453.0	.18130	.2381	.2888	.9220	.1479-01	.9280-02	1.454	10.65	591.2
179	4.0000	1454.0	.17480	.2269	.2725	.9220	.1395-01	.8948-02	1.456	10.77	585.1
179	4.0000	1455.0	.16040	.2098	.2534	.9220	.1297-01	.8213-02	1.306	9.879	588.8
179	4.0000	1456.0	.16640	.2184	.2648	.9220	.1355-01	.8517-02	1.337	9.697	590.9
179	5.0000	1457.0	.15360	.1995	.2395	.9220	.1226-01	.7864-02	1.280	9.630	585.1
179	5.0000	1458.0	.16920	.2209	.2663	.9220	.1363-01	.8664-02	1.387	10.25	587.8

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = .0000 BETA = -5.000 IH NO = 72.00 MACH = 4.020

•••TEST CONDITIONS•••

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
169	.0000	-5.000	4.020	72.60	750.0	177.2	.4660	5.269	2622.	.2205-03	.1427-06	4.053

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
169	.5113-01	.1142-01

•••TEST DATA•••

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
169	1.0000	1444.0	.13870	.1818	.2202	.9220	.1126-01	.7090-02	1.120	8.260	591.9
169	1.0000	1445.0	.15620	.2083	.2560	.9220	.1309-01	.7988-02	1.199	8.809	599.8
169	2.0000	1446.0	.13050	.1705	.2059	.9220	.1053-01	.6673-02	1.067	8.007	590.1
169	2.0000	1447.0	.14150	.1905	.2362	.9220	.1208-01	.7236-02	1.056	7.929	603.9
169	2.0000	1448.0	.14310	.1934	.2407	.9220	.1230-01	.7318-02	1.056	7.736	605.6
169	3.0000	1449.0	.15680	.2093	.2575	.9220	.1316-01	.8018-02	1.200	8.812	600.2
169	3.0000	1450.0	.14810	.1992	.2468	.9220	.1262-01	.7572-02	1.107	8.316	603.6
169	3.0000	1451.0	.15160	.2057	.2571	.9220	.1314-01	.7752-02	1.105	8.285	607.3
169	3.0000	1452.0	.15950	.2156	.2684	.9220	.1372-01	.8157-02	1.176	8.763	605.7
169	3.0000	1453.0	.15120	.2042	.2542	.9220	.1300-01	.7730-02	1.116	8.116	605.6
169	4.0000	1454.0	.16570	.2253	.2821	.9220	.1442-01	.8474-02	1.202	8.793	608.1
169	4.0000	1455.0	.16330	.2244	.2839	.9220	.1452-01	.8348-02	1.149	8.592	612.3
169	4.0000	1456.0	.15380	.2108	.2660	.9220	.1360-01	.7862-02	1.090	7.827	611.3
169	5.0000	1457.0	.17290	.2395	.3054	.9220	.1561-01	.8841-02	1.192	8.842	615.0
169	5.0000	1458.0	.18720	.2605	.3339	.9220	.1707-01	.9569-02	1.274	9.278	616.8

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
165	.0000	.0000	4.020	72.70	747.0	176.6	.4660	5.276	2618.	.2216-03	.1422-06	4.080

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
165	.5114-01	.1139-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHOT DEG. R /SEC	TW DEG. R
165	1.0000	1444.0	.16770	.2122	.2493	.9220	.1275-01	.8576-02	1.526	11.38	569.4
165	1.0000	1445.0	.18000	.2304	.2732	.9220	.1397-01	.9204-02	1.572	11.68	576.5
165	2.0000	1446.0	.14250	.1783	.2074	.9220	.1061-01	.7288-02	1.358	10.35	561.0
165	2.0000	1447.0	.15910	.2035	.2413	.9220	.1234-01	.8135-02	1.391	10.59	576.4
165	2.0000	1448.0	.16760	.2156	.2569	.9220	.1314-01	.8570-02	1.437	10.66	579.7
165	3.0000	1449.0	.15870	.2000	.2340	.9220	.1197-01	.8117-02	1.471	10.98	566.2
165	3.0000	1450.0	.16410	.2083	.2452	.9220	.1254-01	.8392-02	1.479	11.28	571.2
165	3.0000	1451.0	.16990	.2168	.2563	.9220	.1311-01	.8690-02	1.503	11.45	574.4
165	3.0000	1452.0	.17420	.2225	.2633	.9220	.1347-01	.8910-02	1.535	11.61	575.1
165	3.0000	1453.0	.17250	.2201	.2605	.9220	.1332-01	.8819-02	1.521	11.24	574.9
165	4.0000	1454.0	.16730	.2115	.2482	.9220	.1269-01	.8554-02	1.529	11.40	568.6
165	4.0000	1455.0	.16340	.2085	.2466	.9220	.1261-01	.8357-02	1.444	11.00	574.5
165	4.0000	1456.0	.17050	.2178	.2579	.9220	.1319-01	.8721-02	1.501	10.97	575.3
165	5.0000	1457.0	.16740	.2123	.2499	.9220	.1278-01	.8560-02	1.510	11.45	570.9
165	5.0000	1458.0	.11050	.1403	.1652	.9220	.8451-02	.5652-02	.9950	7.411	571.3

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = .0000 BETA = 5.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
167	.0000	5.000	4.020	72.70	740.0	174.8	.4660	5.275	2605.	.2238-03	.1408-06	4.141

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
167	.5106-01	.1132-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTHDT DEG. R /SEC	TW DEG. R
167	1.0000	1444.0	.17860	.2366	.2891	.9220	.1476-01	.9119-02	1.377	10.17	589.0
167	1.0000	1445.0	.17810	.2366	.2899	.9220	.1480-01	.9094-02	1.361	10.04	590.3
167	2.0000	1446.0	.15120	.1957	.2343	.9220	.1196-01	.7723-02	1.257	9.498	577.2
167	2.0000	1447.0	.16380	.2163	.2636	.9220	.1346-01	.8366-02	1.276	9.656	587.5
167	2.0000	1448.0	.14960	.1971	.2398	.9220	.1224-01	.7640-02	1.172	8.668	586.5
167	3.0000	1449.0	.13650	.1744	.2065	.9220	.1054-01	.6970-02	1.187	8.849	569.7
167	3.0000	1450.0	.13400	.1728	.2062	.9220	.1053-01	.6844-02	1.129	8.597	575.0
167	3.0000	1451.0	.14480	.1881	.2260	.9220	.1154-01	.7393-02	1.187	9.019	579.4
167	3.0000	1452.0	.15500	.2023	.2440	.9220	.1246-01	.7913-02	1.251	9.432	581.8
167	3.0000	1453.0	.15290	.1988	.2390	.9220	.1220-01	.7807-02	1.251	9.217	579.7
167	4.0000	1454.0	.12460	.1578	.1854	.9220	.9469-02	.6365-02	1.120	8.376	563.9
167	4.0000	1455.0	.11560	.1484	.1764	.9220	.9005-02	.5903-02	.9890	7.540	572.4
167	4.0000	1456.0	.13580	.1761	.2111	.9220	.1078-01	.6936-02	1.123	8.196	578.1
167	5.0000	1457.0	.11050	.1400	.1647	.9220	.8408-02	.5645-02	.9910	7.538	564.3
167	5.0000	1458.0	.12800	.1638	.1942	.9220	.9915-02	.6537-02	1.108	8.254	570.5

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = 5.000 BETA = -5.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
175	5.030	-5.000	4.020	72.80	747.0	176.6	.4670	5.280	2618.	.2217-03	.1422-06	4.082

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
175	.5116-01	.1138-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
175	1.0000	1444.0	.10450	.1330	.1570	.9220	.8032-02	.5347-02	.9330	6.941	573.0
175	1.0000	1445.0	.10800	.1391	.1659	.9220	.8488-02	.5526-02	.9230	6.846	580.3
175	2.0000	1446.0	.10180	.1291	.1520	.9220	.7778-02	.5206-02	.9180	6.956	571.1
175	2.0000	1447.0	.10160	.1310	.1563	.9220	.7998-02	.5196-02	.8640	6.565	581.0
175	2.0000	1448.0	.12640	.1647	.1983	.9220	.1014-01	.6468-02	1.041	7.696	586.5
175	3.0000	1449.0	.11830	.1515	.1798	.9220	.9197-02	.6054-02	1.033	7.671	576.8
175	3.0000	1450.0	.10620	.1367	.1628	.9220	.8328-02	.5435-02	.9120	6.931	579.6
175	3.0000	1451.0	.10970	.1422	.1706	.9220	.8725-02	.5612-02	.9170	6.953	584.0
175	3.0000	1452.0	.11660	.1512	.1813	.9220	.9275-02	.5965-02	.9740	7.338	584.0
175	3.0000	1453.0	.12790	.1663	.2000	.9220	.1023-01	.6542-02	1.057	7.768	585.8
175	4.0000	1454.0	.13270	.1724	.2072	.9220	.1060-01	.6788-02	1.100	8.141	585.3
175	4.0000	1455.0	.12520	.1648	.2002	.9220	.1024-01	.6404-02	.9960	7.525	591.8
175	4.0000	1456.0	.12730	.1681	.2049	.9220	.1048-01	.6512-02	1.002	7.258	593.6
175	5.0000	1457.0	.14770	.1963	.2407	.9220	.1231-01	.7558-02	1.141	8.529	596.4
175	5.0000	1458.0	.15620	.2080	.2556	.9220	.1307-01	.7990-02	1.198	8.806	597.5

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = 5.000 BETA = .0000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
171	4.990	.0000	4.020	72.70	750.0	177.3	.4660	5.271	2623.	.2205-03	.1427-06	4.053

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
171	.5114-01	.1142-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
171	1.0000	1444.0	.92800-01	.1152	.1332	.9220	.6811-02	.4744-02	.9140	6.858	557.4
171	1.0000	1445.0	.10670	.1338	.1560	.9220	.7979-02	.5454-02	1.009	7.537	565.3
171	2.0000	1446.0	.73100-01	.8980-01	.1030	.9220	.5268-02	.3738-02	.7530	5.770	548.8
171	2.0000	1447.0	.78300-01	.9760-01	.1132	.9220	.5790-02	.4006-02	.7610	5.841	560.2
171	2.0000	1448.0	.99900-01	.1266	.1488	.9220	.7612-02	.5111-02	.9100	6.780	572.1
171	3.0000	1449.0	.80600-01	.9930-01	.1142	.9220	.5838-02	.4121-02	.8200	6.167	551.3
171	3.0000	1450.0	.77300-01	.9580-01	.1107	.9220	.5660-02	.3955-02	.7680	5.907	556.0
171	3.0000	1451.0	.84600-01	.1057	.1228	.9220	.6282-02	.4329-02	.8150	6.244	562.0
171	3.0000	1452.0	.94400-01	.1185	.1382	.9220	.7069-02	.4827-02	.8900	6.767	565.7
171	3.0000	1453.0	.10900	.1376	.1613	.9220	.8247-02	.5572-02	1.005	7.444	569.8
171	4.0000	1454.0	.98300-01	.1219	.1409	.9220	.7208-02	.5025-02	.9710	7.282	557.0
171	4.0000	1455.0	.10300	.1294	.1512	.9220	.7733-02	.5266-02	.9660	7.389	566.7
171	4.0000	1456.0	.11980	.1523	.1796	.9220	.9182-02	.6127-02	1.078	7.882	574.3
171	5.0000	1457.0	.11710	.1468	.1711	.9220	.8748-02	.5988-02	1.110	8.442	564.7
171	5.0000	1458.0	.12470	.1571	.1839	.9220	.9403-02	.6378-02	1.160	8.654	568.3

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = 5.000 BETA = 5.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
173	5.050	5.000	4.020	72.70	748.0	176.8	.4660	5.275	2619.	.2213-03	.1423-06	4.072

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
173	.5114-01	.1140-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
173	1.0000	1444.0	.13200	.1658	.1936	.9220	.9899-02	.6750-02	1.238	9.255	564.7
173	1.0000	1445.0	.13090	.1646	.1924	.9220	.9840-02	.6692-02	1.221	9.120	565.8
173	2.0000	1446.0	.12070	.1504	.1743	.9220	.8917-02	.6172-02	1.170	8.926	558.6
173	2.0000	1447.0	.12180	.1534	.1794	.9220	.9174-02	.6230-02	1.133	8.666	566.4
173	2.0000	1448.0	.11900	.1509	.1775	.9220	.9079-02	.6088-02	1.078	8.033	571.1
173	3.0000	1449.0	.98600-01	.1227	.1421	.9220	.7270-02	.5042-02	.9600	7.202	557.8
173	3.0000	1450.0	.10390	.1301	.1514	.9220	.7745-02	.5313-02	.9870	7.568	562.3
173	3.0000	1451.0	.10880	.1370	.1602	.9220	.8194-02	.5565-02	1.012	7.740	566.4
173	3.0000	1452.0	.11730	.1484	.1743	.9220	.8914-02	.6000-02	1.071	8.122	569.7
173	3.0000	1453.0	.11800	.1490	.1748	.9220	.8938-02	.6033-02	1.083	8.023	568.7
173	4.0000	1454.0	.72600-01	.9010-01	.1042	.9220	.5329-02	.3714-02	.7150	5.369	555.7
173	4.0000	1455.0	.71800-01	.9000-01	.1048	.9220	.5358-02	.3673-02	.6820	5.225	562.6
173	4.0000	1456.0	.10430	.1318	.1548	.9220	.7915-02	.5333-02	.9540	6.996	569.3
173	5.0000	1457.0	.66600-01	.8280-01	.9590-01	.9220	.4902-02	.3404-02	.6500	4.962	557.2
173	5.0000	1458.0	.73100-01	.9140-01	.1063	.9220	.5437-02	.3738-02	.6980	5.226	561.4

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = -5.000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
187	-5.010	-9.000	4.020	72.90	749.0	177.0	.4680	5.292	2620.	.2218-03	.1425-06	4.079

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
187	.5123-01	.1138-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
187	1.0000	1444.0	.21030	.2663	.3130	.9220	.1604-01	.1077-01	1.918	14.29	570.9
187	1.0000	1445.0	.23020	.2933	.3464	.9220	.1775-01	.1179-01	2.054	15.27	574.8
187	2.0000	1446.0	.21170	.2674	.3136	.9220	.1606-01	.1085-01	1.951	14.80	569.1
187	2.0000	1447.0	.22850	.2927	.3475	.9220	.1780-01	.1170-01	1.996	15.18	578.4
187	2.0000	1448.0	.22930	.2948	.3508	.9220	.1797-01	.1175-01	1.982	14.70	580.3
187	3.0000	1449.0	.25830	.3279	.3863	.9220	.1979-01	.1323-01	2.332	17.36	572.7
187	3.0000	1450.0	.25510	.3265	.3872	.9220	.1984-01	.1307-01	2.237	17.02	577.7
187	3.0000	1451.0	.26270	.3376	.4018	.9220	.2058-01	.1346-01	2.272	17.26	580.2
187	3.0000	1452.0	.21870	.2801	.3324	.9220	.1703-01	.1120-01	1.913	14.44	578.2
187	3.0000	1453.0	.25600	.3277	.3887	.9220	.1991-01	.1311-01	2.244	16.55	577.9
187	4.0000	1454.0	.28390	.3627	.4294	.9220	.2200-01	.1454-01	2.507	18.63	576.6
187	4.0000	1455.0	.26670	.3438	.4101	.9220	.2101-01	.1366-01	2.283	17.33	581.9
187	4.0000	1456.0	.26650	.3432	.4090	.9220	.2095-01	.1365-01	2.289	16.69	581.3
187	5.0000	1457.0	.28980	.3726	.4435	.9220	.2272-01	.1485-01	2.502	18.88	580.4
187	5.0000	1458.0	.28680	.3695	.4407	.9220	.2258-01	.1469-01	2.457	18.21	581.7

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = .0000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
183	.0000	-9.000	4.020	72.90	749.0	176.9	.4680	5.291	2620.	.2218-03	.1425-06	4.079

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
183	.5122-01	.1138-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
183	1.0000	1444.0	.12370	.1624	.1968	.9220	.1008-01	.6338-02	.9970	7.353	591.5
183	1.0000	1445.0	.12960	.1727	.2123	.9220	.1087-01	.6639-02	.9960	7.320	598.8
183	2.0000	1446.0	.13440	.1780	.2176	.9220	.1114-01	.6886-02	1.053	7.879	596.0
183	2.0000	1447.0	.13150	.1783	.2227	.9220	.1141-01	.6736-02	.9610	7.206	606.2
183	2.0000	1448.0	.13660	.1870	.2357	.9220	.1208-01	.6997-02	.9720	7.102	609.9
183	3.0000	1449.0	.16490	.2257	.2845	.9220	.1457-01	.8447-02	1.174	8.578	609.9
183	3.0000	1450.0	.15620	.2155	.2737	.9220	.1402-01	.7999-02	1.088	8.134	612.8
183	3.0000	1451.0	.15540	.2162	.2769	.9220	.1418-01	.7962-02	1.060	7.913	615.7
183	3.0000	1452.0	.15500	.2144	.2731	.9220	.1399-01	.7939-02	1.072	7.956	613.8
183	3.0000	1453.0	.14950	.2060	.2614	.9220	.1339-01	.7656-02	1.044	7.571	612.4
183	4.0000	1454.0	.18250	.2576	.3348	.9220	.1715-01	.9350-02	1.201	8.733	620.4
183	4.0000	1455.0	.16970	.2417	.3172	.9220	.1625-01	.8691-02	1.092	8.119	623.2
183	4.0000	1456.0	.15750	.2218	.2876	.9220	.1473-01	.8068-02	1.042	7.450	619.7
183	5.0000	1457.0	.18900	.2750	.3692	.9220	.1891-01	.9681-02	1.158	8.533	629.1
183	5.0000	1458.0	.19000	.2766	.3713	.9220	.1902-01	.9733-02	1.164	8.431	629.2

IH72, RGT SRB CLEAN, FWD SEPART MOTOR HU/HREF (RVZM69)

FWD SEPARATN MOTOR

PARAMETRIC DATA

ALPHA = 5.000 BETA = -9.000 IH NO = 72.00 MACH = 4.020

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PO PSIA	TO DEG. R	T DEG. R	P PSIA	Q PSI	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2	RN/L /FT X10 6
185	5.010	-9.000	4.020	73.00	749.0	176.9	.4680	5.293	2620.	.2219-03	.1424-06	4.081

RUN NUMBER	HREF BTU/ R FT2SEC	STN NO REF(R) =.0175
185	.5123-01	.1138-01

TEST DATA

RUN NUMBER	ROW	T/C NO	H/HREF R=1.0	H/HREF R=.95	H/HREF R= TAW/TO	TAW/TO	H(TAW) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
185	1.0000	1444.0	.10290	.1314	.1554	.9220	.7963-02	.5274-02	.9120	6.781	575.8
185	1.0000	1445.0	.10460	.1352	.1616	.9220	.8279-02	.5359-02	.8870	6.571	583.2
185	2.0000	1446.0	.10390	.1328	.1573	.9220	.8058-02	.5323-02	.9160	6.925	576.6
185	2.0000	1447.0	.12560	.1634	.1966	.9220	.1007-01	.6434-02	1.040	7.875	587.1
185	2.0000	1448.0	.12140	.1598	.1943	.9220	.9957-02	.6218-02	.9670	7.126	593.2
185	3.0000	1449.0	.12540	.1637	.1976	.9220	.1012-01	.6424-02	1.027	7.581	588.9
185	3.0000	1450.0	.12000	.1579	.1919	.9220	.9830-02	.6148-02	.9580	7.235	592.8
185	3.0000	1451.0	.12490	.1659	.2032	.9220	.1041-01	.6397-02	.9690	7.299	597.3
185	3.0000	1452.0	.12740	.1688	.2064	.9220	.1057-01	.6526-02	.9960	7.454	596.2
185	3.0000	1453.0	.12550	.1662	.2030	.9220	.1040-01	.6428-02	.9820	7.182	595.9
185	4.0000	1454.0	.14550	.1950	.2409	.9220	.1234-01	.7456-02	1.100	8.073	601.2
185	4.0000	1455.0	.14590	.1997	.2516	.9220	.1289-01	.7476-02	1.039	7.780	609.7
185	4.0000	1456.0	.13710	.1858	.2320	.9220	.1189-01	.7023-02	1.002	7.216	606.0
185	5.0000	1457.0	.16730	.2326	.2978	.9220	.1526-01	.8570-02	1.142	8.468	615.5
185	5.0000	1458.0	.16850	.2342	.2995	.9220	.1534-01	.8634-02	1.153	8.407	615.2